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People & the Planet

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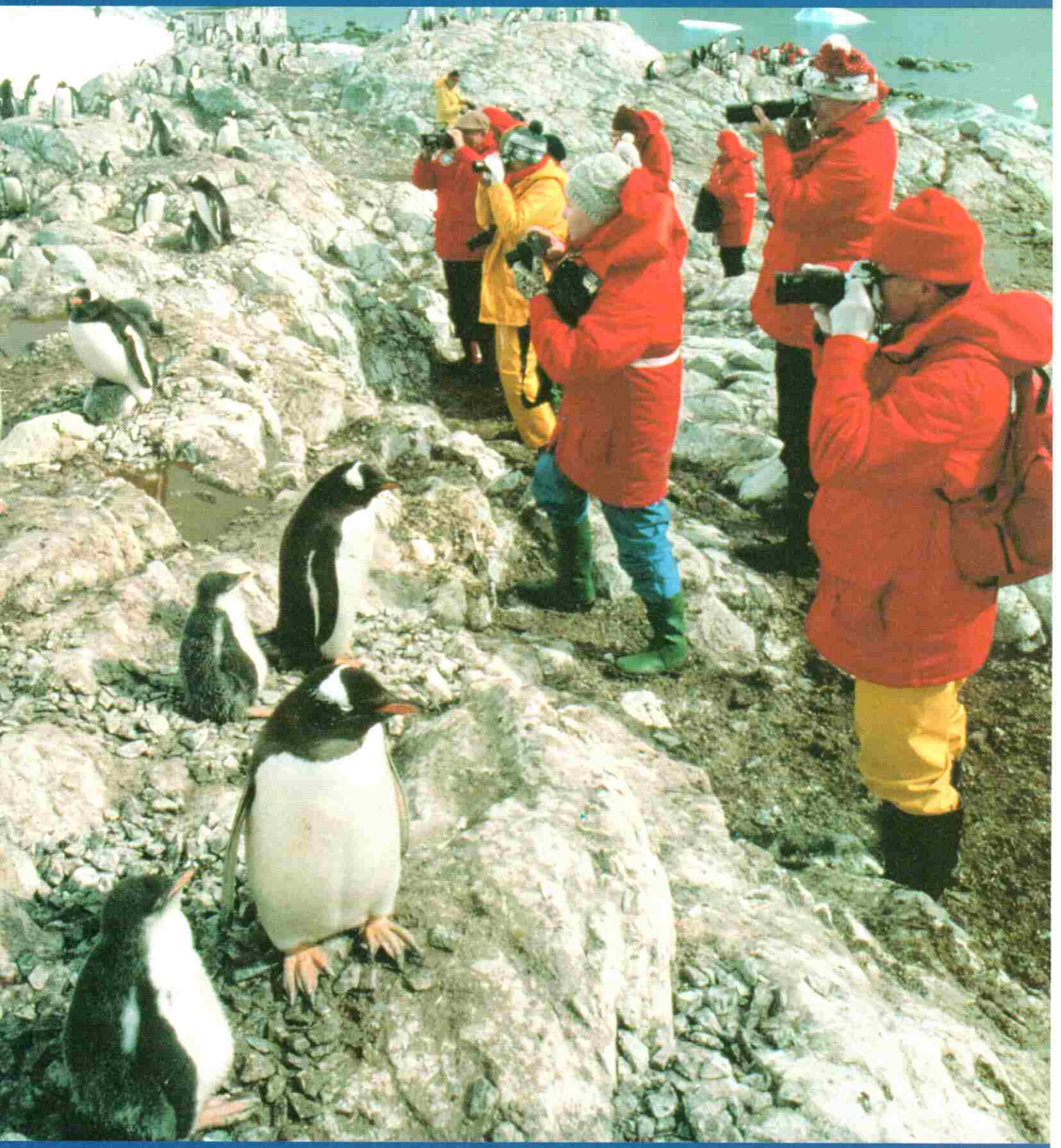

SUSTAINABLE TOURISM

People & the Planet

Front cover: Tourists among Gentoo Penguins, Paradise Bay, Antarctica
Credit: Colin Monteath/TCS
Left: Ipanema beach, Rio, Brazil
Credit: John Maier/Still Pictures

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People & the Planet

Touring into trouble

Tourism may appear at first sight to be a frivolous business: something that is enjoyed by those who can afford it when they are not occupied in more serious matters. In fact, as Sue Wheat points out in her introductory overview, tourism is already one of the world's biggest industries. Soon it may become *the* biggest. By 2010, the annual income from tourism is expected to top $1,500 billion, with over a billion international arrivals. The impact on the environment, on local economies and on cultures, already great, will be multiplied several times over.

From an environmental perspective, the sheer pressure of numbers on coastal habitats, on mountain areas such as the Alps or Himalayas, or on heritage sites and national parks is just one aspect of the problem. At the same time, the demands for land, water and other local resources are giving rise to increasing conflict between the tourist industry and the needs of local people. One only has to visit new tourist developments in Goa or the Sinai to see the reality of this. Indeed, the social and cultural impacts of tourism, especially in poor countries, are probably the most worrying aspect of a global industry which offers cut price packages to remote and 'exotic' destinations, which are home to indigenous people. As Paul Gonsalves argues these are all too easily exploited and displaced.

So how do we create sustainable tourism? Gonsalves believes only regulation will do. Sue Wheat takes comfort from the efforts by the tourist industry itself to reduce its social and environmental footprint, but remains sceptical unless the broader issues of equity and local control are tackled. Erlet Cater sees some hope in 'ecotourism' in all its various forms, while recognizing the in-built dilemmas of small-scale ecologically sensitive tourism, when it grows big. In this issue we explore some of the variations on the ecotourist theme, which at its best can enrich both the traveller, the environment and the people who live there.

John Rowley

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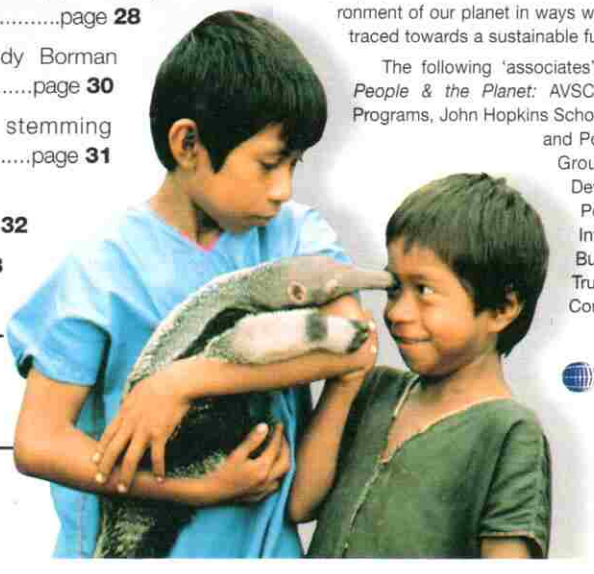


Rio+5: Picking

With just two years to go before the start of the Third Millennium, the failure of the UN General Assembly Special Session (UNGASS) in June to take forward the objectives set out at the Earth Summit in Rio has cast doubt on the global effort to create a sustainable future.

There are hopes that the Kyoto Summit on Climate Change in December will at last produce a workable plan to tackle the problem of global warming. But even that looks uncertain.

So where does that leave us? How much progress has been made since Rio? Or must the world continue to consume its natural capital at an accelerating pace, with dire consequences for future generations?

In report after report issued during UNGASS the trends are mostly in the wrong direction. But there are some hopeful signs. This Newsfile sets out the balance sheet in the wake of Rio + 5.

Population and poverty

Ironically, the one area where significant progress has been achieved is population, a subject given little attention in Rio. Population growth rates and fertility levels are falling much faster than previously thought. The latest UN population figures show that the earth is adding just over 80 million people a year to the human ark, an annual decrease of 10 million over previous projections. Many developing countries, particularly in Asia and Latin America, are now on track to stabilize their populations within one or two generations.

Poverty, on the other hand, is as entrenched as ever. Gaps between rich and poor worlds continue to widen. The poorest countries, especially in sub-Saharan Africa and South Asia, have become even more marginalized. Over 1.1 billion people – 20 per cent of the world's total – live in absolute poverty on the equivalent of one dollar a day or less; roughly 2 billion survive on $2 a day or less. More worrying, a disproportionate number of the world's poorest people are women and children. Since 1970, the number of rural women living in absolute poverty has increased by 50 per cent, compared to only 30 per cent for men.

Action taken: The UN Conference on Population and Development, held in Cairo in September 1994, adopted a strong action plan centred around the provision of improved reproductive health services and empowerment of women. Since then, many governments have strengthened national population policies and programmes, but funding levels have not lived up to the promises of Cairo.

Both Cairo and Rio called for the alleviation of poverty as a fundamental step towards sustainable development. At the 1995 Social Summit in Copenhagen, world leaders pledged to eradicate poverty by an unspecified date. Targets were to be set by each country, but so far few have done so.

Consumption/Production

Rich country residents – about 20 per cent of the world's population – continue to consume roughly 80 per cent of the world's finite resources. In addition, a number of large developing countries, such as China and Brazil, are moving rapidly toward higher consumption lifestyles. The 'ecological footprint' left by each individual on the planet is growing larger, not smaller. According to a recent UN study, if all the world's 5.8 billion people were to consume and waste resources on the same level as Americans and Europeans, three planet earths would be required to accommodate everyone's needs.

Action taken: In industrialized countries, governments are forming partnerships with industry, making steady progress on recycling, re-use and waste reduction. New, more efficient technologies have also cut the use of raw materials and reduced waste. Technology transfer is going on between North and South, but not at the pace called for in Rio.

Forests

Forest loss continues at unacceptable rates. About 16 million hectares of forest, an area roughly the size of Nepal, are cut, bulldozed or burned each year. According to the World Resources Institute in Washington DC, half of the world's original forest cover – 3 billion hectares – have been lost, with most of the destruction done in the past four decades.

Action taken: Based on the Forest Principles adopted in Rio, an Intergovernmental Panel on Forests agreed to over 100 proposals for sustainable forest management when it concluded talks in March 1997. At Rio+5, however, a formal 'forest convention' was shelved when the proposal ran into strong opposition from the United States and Japan, along with many NGOs (including WWF and IUCN). NGOs applauded the failure to move on a convention because they feel that a treaty would only enshrine the standards of a weak consensus. Instead, governments should move ahead on implementing commitments already made. One positive development is worth noting. The World Bank, in co-operation with WWF, announced the launching of a major effort to conserve and manage forests sustainably. The initial plan calls for governments to set aside 50 million hectares for biodiversity conservation and to bring 200 million hectares (100 million in each hemisphere) under sustainable management practices.

Freshwater

According to a comprehensive survey of global water resources carried out by the UN in 1997, one-third of the world's population lives in countries facing moderate to severe water stress. Moreover, two-thirds of humanity, close to 5.5 billion people, will be living in water-short countries by the year 2025, unless current patterns of consumption and waste are reversed. During this century, water use has grown twice as fast as the global population. Increasingly, water is seen as one of the major factors hindering economic development in both industrialized and developing countries in the coming decades.

In addition, about 20 per cent of the global population, over 1 billion people, lack access to clean drinking water, while 50 per cent – close to 3 billion do not have adequate sanitation services. WHO says this is one of the main reasons why disease rates continue to outpace health care infrastructures in many poorer countries.

Action taken: Little progress has been made since Rio in implementing recommendations to better manage and share freshwater resources. However, World Bank President James Wolfensohn, announced that the Bank has launched a new Global Water Programme. Governments want a new Global Water Strategy to be discussed at the 1998 session of the Commission on Sustainable Development (CSD).

up the pieces

Oceans

Marine pollution, coupled to population pressures and loss of critical coastal resources, such as mangroves, seagrasses and coral reefs, now threaten the health and livelihood of close to two-thirds of humanity – 3.8 billion people – living in coastal areas. In 1995 nearly 70 per cent of the world's fish stocks were either over-exploited, fully-exploited, or slowly recovering, according to the UN Food and Agriculture Organization (FAO). The collapse of the world's fisheries is due mainly to the over-capacity of the fishing industry, poor stock management, and a marked increase in consumption of seafood.

Action taken: An international agreement to combat land-based sources of marine pollution was adopted in 1995, though its implementation is unclear. Negotiations also began on a treaty to control persistent organic pollutants, such as PCBs and dioxin. A legal agreement on migratory fish stocks was adopted in 1994, but has not yet entered into force. The International Coral Reef Initiative, launched by the United States and six other countries in 1994, holds much promise for reversing the decline of coral reefs, but it is a long-term effort.

Biodiversity

Nearly everyone agrees that the current rate of habitat loss and species extinction is unprecedented. It has been estimated, conservatively, that 50,000 plant and animal species will be pushed into extinction every year over the course of the coming decades. The loss of insects and micro-organisms is thought to be enormous, but no estimates exist.

In addition, about three-quarters of the genetic diversity of domestic agricultural crops has been lost since 1900, according to FAO. The accelerated degradation of wildlife habitats ensures the continued loss and impoverishment of biological diversity.

Action taken: The Convention on Biological Diversity, ratified by 161 countries since Rio, mandates governments to protect plant and animal species through habitat preservation and other means. So far, progress has been slow and incremental.

Land degradation

Of the world's 5.2 billion hectares of agricultural drylands, 70 per cent is degraded or at risk from desertification, according to UNEP. Of this amount, 1.2 billion hectares – an area the size of China and India combined – has experienced moderate to severe soil degradation over the past five decades. Another 300 million hectares of farmland have been abandoned. UNEP estimates that desertification alone costs the world about $42 billion a year in lost production.

These are alarming trends, particularly in light of the fact that world food production will have to double over the next 30 years in order to keep up with population growth and changing consumption patterns.

Action taken: The Convention to Combat Desertification entered into force in December 1996. It has spawned new approaches and aid partnerships. The World Food Summit, held in Rome in November 1996, called for a halving of hunger by 2015. It is too early to assess progress in advancing these goals.

Climate change

Climate models predict that global temperature will rise by 1 to 3 degrees Celsius by 2100. Sea level may also rise by up to one metre. Since developed countries produce three-quarters of all carbon dioxide and other greenhouse gases, they agreed to take the lead in climate change mitigation. Industrialized countries, however, are also better able to deal with the consequences of global climate change, whereas developing countries are not.

In New York, President Maumoon Abdul Gayoom of the Maldives told delegates that time was running out for his country and many other small, low-lying island states. "I left Rio with hope," he said, "but today I leave here with the fear that unless we all act now, and with a renewed commitment, that my country, and many countries like us would never have a voice nor a seat at a future Rio plus meeting."

Fossil fuel use is slowly stabilizing in developed countries, but it continues to rise in the developing world. Global energy consumption is projected to more than double by 2050. Over 2 billion people in developing countries, mostly in rural areas, are still dependent on wood and other local biomass for their energy needs.

Action taken: The UN Convention on Climate Change, signed in Rio, has been ratified by 166 countries, but few developed countries will meet the aim of reducing emissions of carbon dioxide and other greenhouse gases to 1990 levels by the year 2000. At the Rio+5 Conference no progress was made on setting new reduction targets and timetables for meeting them. Action on climate change has been left for the meeting in Kyoto, Japan scheduled for December 1997. The World Bank said it is willing to launch a Carbon Investment Fund to allow developed countries to earn credits for assisting developing countries in reducing their emissions, if this is agreed in Kyoto.

Other initiatives

Governments agreed to phase out the use of leaded petrol as soon as possible. They also asked the United Nations to undertake a work programme to promote sustainable tourism under the CSD.

The bill

The architects of Agenda 21 estimated that it would cost about $600 billion a year for developing countries to implement the Action Plan. Included in that figure was $125 billion in grant or concessional funds to be provided by the international community. Most developed countries pledged to increase their development aid to 0.7 per cent of their gross domestic product (GDP) as soon as possible. However, in the five years since Rio, total development aid fell from an average of 0.33 per cent of GDP in 1992 to 0.27 per cent in 1995; in dollar terms from $60 billion to $55 billion. It is even lower now. Only five countries have managed to reach or exceed the 0.7 per cent goal: Denmark, Sweden, Norway, Finland and the Netherlands.

And while no progress was made on funding in New York, a recent UN report concluded that $1.2 trillion could be raised through domestic policy reforms in both developed and developing countries, more than enough to pay for Agenda 21. The report *Finance for Sustainable Development: The Road Ahead* argued that massive savings could be generated by reducing or eliminating harmful government subsidies, such as those which underwrite the non-sustainble use of water resources and contribute directly to the depletion of ocean fisheries.

Cutting these could free $435 billion. Cuts in military expenditures could save another $70 billion. Additional revenue could come from the following sources: taxes on gasoline and the carbon content of fossil fuels; expanding tax bases and better tax collection systems; and fees for the exploitation of natural resources, including water, fisheries, forests and minerals.

Don Hinrichsen

Tourism, already one of the world's biggest industries, is expected to treble in size by the year 2010. Now, concern about tourism's impact on fragile environments and cultures is leading to serious attempts to make it more 'sustainable'. **Sue Wheat** reports.

The tourism

"Getting away from it all," is understandably popular. With so many wonderful places in the world, prices of international travel falling, and the stresses and strains of everyday life increasing, more people are travelling.

Last year, international tourist arrivals reached an all time high of 592 million, and receipts from international travel, excluding airfares, climbed to US$423 billion. "1996 was an excellent year for tourism," said World Tourism Organization Secretary-General Francesco Frangialli. "The sustained growth that we have seen since the beginning of this decade and the acceleration now underway proves that tourism is one of the world's most durable and dynamic economic sectors."

But around every silver lining, there is always a cloud, and as tourism grows, so too do the criticisms. Evidence of the downside of tourism – culturally, environmentally and economically – is now such that tourism has become a dirty word amongst many communities, environmental groups, and human rights campaigners.

Tourism's vociferous appetite for basic resources – land, water and energy – has meant that the tourism industry and governments are increasingly finding themselves opposed over land rights and water rights by local people. One of the most famous long-term tourism protests has been in Goa, India. With one five-star hotel consuming as much water as five local villages and one five-star tourist consuming 28 times more electricity per day than a local Goan, local discontent over resource-use is understandable.

Lack of access by locals to public beaches, violation by hotels of environmental regulations, and heavy-handed tactics by local authorities to free-up beach areas for hotels' use, have all been cited in legal disputes throughout the world. Commercialization of culture and destruction of traditional lifestyles also became commonplace, from the performance of sacred Hawaiian ceremonies at hotel receptions, to the advertising of local funerals outside guest houses in Bali, and the destruction of traditional livelihoods through pursuing tourism as a virtual monocrop.

Tourism is also cited in terms of gross human rights abuse. In Burma, the military junta has forcibly moved millions of people from their homes to make room for tourism development, and used hundreds of thousands as forced labour on tourism-related projects. In East Africa, the Maasai have been evicted from their lands which have been made into national parks for safari tourism and now live in dire poverty outside their lands, and in Sarawak, Malaysia, plans to build the Bakun Dam, which would involve flooding an area the size of Singapore full of protected species and displacing 8000 indigenous people, also include developing the area for 'ecotourism'.

Such problems are often brushed aside by the tourism industry and by government, who cite the economic bonuses behind promoting tourism. The World Travel and Tourism

Thomas Raupach/Still Pictures

Right: Overcrowded beach on Germany's Baltic coast
Main picture: Safari vans cluster around lionesses, Kenya

juggernaut

Council (WTTC) points out that tourism creates more than 10 per cent of global economic output and one in nine jobs. And the World Tourism Organization predicts that international arrivals will reach 1 billion by the year 2010, pushing revenues to US$1,550 billion – nearly four times more than current earnings.

But as foreign exchange leakages from developing to developed countries equal around 60 to 75 per cent, and local jobs are generally menial and low-paid, the economic benefits are often skewed away from destination countries. This is particularly the case in destinations which receive a lot of cheap, package tours. "The tourist purchases a cheap package holiday to The Gambia, for roughly £300 and sometimes less for a week's stay in luxury," says Monica Morris-Jarra, who works with Afrikan Heritage – a small, locally-owned hotel in The Gambia, "But by far the greater part of the money stays in the country where the ticket was bought, and as little as £4 per night goes to the hotels. There is no economic sense in this sort of tourism for our country."

'Sustainable tourism' is a concept that has arisen because of the need to get round these environmental, social and economic pitfalls. In *Beyond the Green Horizon: Principles for Sustainable Tourism* published by UK pressure group Tourism Concern, sustainable tourism is defined as: "Tourism and associated infrastructures that: operate within capacities for the regeneration and future productivity of natural resources, recognize the contribution of local people and their cultures, accept that these people must have an equitable share in the economic benefits of tourism, and are guided by the wishes of local people and communities in the destination areas."

Such a definition seems reasonable, but as with the 'sustainable development' of any industry – to implement it is more difficult, particularly in developing countries. How can a country set limits on the numbers of tourists it accepts when it desperately needs foreign exchange to pay off foreign debts and fuel economic growth? How can local people receive an equitable share of tourism's profits when there is no way they can compete with the foreign multinational hotels and tour operators on price, and do not have the same international marketing networks? And how can developers be forced to consult with a representative sample of local people, and not just the business elite?

At the nub of sustainable tourism are issues of equity and local control – issues that it is almost impossible for the tourism industry to address because of their need to maximise profit. Changes are occurring, but they tend to be in simpler areas such as environmental management. Efforts are being made by the hotel industry for instance, to encourage responsible water, waste and energy management, which includes a wide range of techniques including extensive recycling, water and energy conservation and uses of alternative energy, such as solar power.

Fred Hoogervorst/Panos Pictures

Inter-Continental Hotels was the first to initiate a thorough environmental audit of its hotels four years ago and produced an environmental manual for its hotels. The guidelines have since been extended to a broader programme through the International Hotels Environment Initiative which is supported by 12 major hotel chains such as Forte, Hilton International, Holiday Inn Worldwide, Radisson SAS and Sheraton.

As such environmental measures generally help cut costs they are attractive to hoteliers, but the recent experience of one of the IHEI's award-winning hotels, the Taj Group of Hotels in India, shows that environmental management is not the only figure in the sustainable tourism equation. Local tribal peoples – the Adivasis – this year won a court case stopping the Taj from building a hotel in Nagarahole National Park, a protected wildlife habitat. While 'ecotourism' is being welcomed by the government, the 32,000 hunter-gatherer Adivasis have had their access to the forest they lived in for centuries severely curtailed. This includes a ban on cultivation, ritual hunting, keeping of livestock and collection of forest produce, as well as refusal of entry to sacred sites and burial grounds and a ban on traditional music and dance.

"We do not want the Taj because they are bringing non-tribal culture and urban culture to our society which destroys us and will ruin our resource base," explains Babu, one of the Adivasis. "Taj definitely has not come to protect the environment and the Adivasis, it has come to protect its business." The Taj is now appealing against the ruling.

The 'greening' of tourism is therefore something that gains a mixed reaction. On the one hand, more environmental management is needed if tourism is not to use up vast amounts of natural resources at the expense of local environments and communities, but if such measures are merely used as good public relations and cost-saving exercises we are no nearer to sustainable tourism than when the phrase was first thought up.

The story amongst tour operators is also complex. There has been a boom in the last decade in small-scale 'alternative' tour operators, conscious of the impacts of tourism and eager to work closely with host communities so that the impacts can be minimised and their financial benefits can be more than the proverbial 'trickle'. A newly launched British enterprise Discovery Initiatives, describes itself as 'a pioneering ethical, educational and environmental travel company', and partners local communities, environmental charities and agencies around the world, with tourists meeting and working with local experts on environmental and community projects. "The tourism industry absolutely must play a more important role in conservation, but must pay more for the privilege," says Managing Director, Julian Matthews, "I do believe small is beautiful, and small operators are inevitably going to be the ones who can affect their corporations to do things better."

But are such attitudes transferable to the mainstream – the mass tour operators who take the bulk of tourists around the world, and where maintaining market share and filling planes are the bottom line? Larger tour operators have the luxury of being able to move destination once it goes out of fashion or becomes too commercialized. Many donate to small-scale environmental and social projects but most if not all, shy away from making structural changes to their own operations.

Michel Gunther/WWF/Bios

British Airways Holidays – the only British tour operator to have an Environmental Co-ordinator, has funded life-cycle analyses of St. Lucia and the Seychelles, has an extensive customer and staff awareness programme, and supports various conservation projects in destination areas, but actually reducing tourism's environmental and social footprint, comes down to regulation, says their Environmental Co-ordinator, Jan Jackson. "Many companies are loath to make changes and they should be encouraged by regulations – we have health and safety regulations and I would like to see some environmental measures incorporated into them."

Gradually the need for change is being accepted. At this year's International Tourism Exchange Berlin (ITB), the world's largest travel industry fair, environmental ministers from 20 countries called for tourism to be curbed in ecologically and culturally sensitive areas, asking for restrictions on motorised safaris and protection of small islands, beaches and coral reefs. And this May, the social problems related to tourism were highlighted by the World Tourism Organization. Representatives of governments and private groups from 77 countries and territories 'determined to remove the social abuses and exploitation arising from, associated with or occasioned by tourism and its related activities' and signed the World Tourism Organization's 'Manila Declaration on the Social Impacts of Tourism'.

Such commitments are a welcome step forward. Whether they hold any weight, will be revealed by the future of people like Adivasis of Nagarahole, the Burmese, the Maasai, and the indigenous people of Sarawak. ■

Sue Wheat is a London-based journalist specializing in environmental issues. She is editor of Tourism Concern's magazine *In Focus*, obtainable from Tourism Concern, Stapleton House, 277-281 Holloway Road, London N7 8HN, UK. Tel: +44 (0) 171 753 3330, Fax: +44 (0) 171 753 3331, Email: tourconcern@gn.apc.org
Web page:http://www.oneworld.org/tourconcern

Left: Maasai farmer

Above: Snorkelling, Port Cros National Park, France

Ecotourism is the fastest growing part of the world travel business, but whether it destroys more than it protects will depend upon how it is put into practice, says **Erlet Cater**, co-editor of *Ecotourism: a Sustainable Option?*

Ecotourism or ecocide?

Kevin Schafer/Still Pictures

For the travel and tourism industry, ecotourism is the fastest growing 'market segment', generally equated with nature tourism. Interpreted merely as a product, however, it may be ecologically based but not ecologically sound, responsible or sustainable.

To incorporate these vital characteristics ecotourism must adhere to three essential principles:

The first is, perhaps, the most obvious. As an industry based on the beauty and diversity of nature, it is evident that it should not deplete or degrade those resources and thus prejudice its own future. Ecotourism must, therefore, be ecologically sound, requiring a two-way link between itself and environmental conservation.

To consider nature without recognizing the link with people will, however, compromise sustainability. It is now widely recognized that conservation cannot be divorced from development issues. The second principle is therefore that ecotourism must be responsible, paying regard to local needs and improving local welfare.

However, to be truly sustainable, ecotourism needs to fulfil the ambitions and expectations of all interests. The third principle, then, is to consider not only the interests of tourism enterprises and organizations, but also visitor satisfaction, the needs of tourists.

If, ecotourism embodies these essential principles, symbiotic relationships between the varying interests should follow, with environmental protection resulting both from and in enhanced standards of living for local populations, continued profits for the tourism industry, sustained visitor attraction, and revenue for conservation.

An examination of ecotourism across these dimensions, highlights not only its potential but also its problems.

Local benefits

The high ground claimed by ecotourism, in terms of its contribution to development, is that, in principle, it offers enhanced prospects for local involvement compared with conventional tourism. As well a moral obligation to incorporate the local people in projects that affect them, such incorporation has important developmental implications.

Tourism income may be captured locally through revenue sharing schemes, through entrepreneurship and labour, and through the sale of tourist merchandise. Tourism can also act as a catalyst, and even provide some of the finance, for the improvement of essential services such as clean water, sanitation, electricity supply and transport. It may also provide an incentive for improved education and skills and the potential for participation in decision making.

Local involvement also makes sense for conserving natural environments. It has been recognized that, as people realize the benefits from ecotourism, support for conservation increases. This was shown, for example, in a study for WWF in Belize by Lindberg and Enriquez. This found that the designation of Hol Chan Marine Reserve in Belize met with the approval of 63 per cent of nearby residents of San Pedro. Now, with 44 per cent of households receiving direct economic benefits from tourism, support is almost unanimous.

Ecotourism may also provide the incentive for the survival of a traditional culture. The cultural and the natural are

Marc Schlossman/Panos Pictures

Above: Tourists with guide, Monteverde Reserve, Costa Rica
Main Picture: Birdwatchers, Lake Natron in Rift Valley, Tanzania

Jim Thorsell/WWF/IUCN

Tourists and wild dolphins, Shark Bay, Western Australia

often inextricably linked to form the composite attraction of a particular ecotourism destination. The terracing of the Himalayan foothills, the hot springs at Tatopani, Sikkim and the rock graves of Toraja, Sulawesi are all examples of the fusion of the natural and the cultural.

Greater local involvement makes practical sense for national and local governments, agencies and operators using local labour, expertise and knowledge. Education is a two-way process, improved understanding of local circumstances is likely to increase project efficiency. Building upon local experience and traditions provides a foundation for wise and successful development, and, simultaneously, an ecotourism asset.

Introduction to indigenous uses of natural products also broadens the base of environmental interpretation. One of Zanzibar's most popular ecotourism attractions is Mitu's Spice Tours, a village walkabout introducing tourists to the wide variety and multiple uses of exotic flora. Indigenous use of local building materials has practical implications for more appropriate forms of development, and also reduces leakages, lowers costs and enhances local multiplier effects.

Local involvement is not without its problems, however. Revenue sharing schemes may neither benefit the most needy, nor those most adversely affected. Beneficiaries may often be passive recipients, rather than active participants. The emphasis must be on participation rather than patronization, if traditional livelihoods are removed they must be replaced with others.

Local participation, however, often consists of employment rather than entrepreneurship, where constraints of costs of entry, language, education and skills operate. Furthermore, the nature of local employment tends to be low skilled, poorly paid and often seasonal. The higher status, better paid jobs, particularly managerial positions, tend to be occupied by outsiders.

Much disappointment has been registered regarding the failure of ecotourism to enhance rural livelihoods. All community members will not benefit equally. The lodge owners in the Annapurna region of Nepal, for example, benefit most from trekking tourism. It is vital to recognize the heterogeneity of the local community.

Industry profits

The integrity of the tourism 'product' is vital to the interests of tourism entrepreneurs, and all those who are associated with them, such as tourist boards, government departments, NGOs and international aid agencies. Tourism operators benefit from public support, increased credibility and demand for associated products. Sound environmental practice often makes good business sense.

This is most evident in energy conservation. The introduction of alternative energy supplies and more fuel-efficient methods in lodges in the Annapurna Conservation Area is a case in point. Reduced pressures on deforestation are coupled with benefits of time and money for lodge operators.

There are, however, many practical and institutional obstacles to effective ecotourism management, not the least of which will be the problems of vested interests who are more concerned with short term profits than with the long-term.

Pressure of numbers

Another dilemma is the sheer problem of numbers. It could be argued that, strictly defined, 100,000 visitors trekking annually in northern Thailand are not ecotourists. To confine attention, however, to the consideration of small-scale, more easily managed ecotourism projects, involving small specialist groups paying high prices, is to invite ecocide at higher levels.

Rapid growth rates imply inevitable change. Psychological carrying capacity (as well as other types of carrying capacity) will probably be breached and visitor satisfaction compromised. This is especially true when visitors are concentrated in space and time. Many destinations are seasonal. Over 60 per cent of trekkers visit the Annapurna region in four winter months. At Taman Negara, Malaysia, until recent improvements in surface and air access, the park was closed from November to January when the Tembeling river was unnavigable. Concentration of ecotourists in more popular spots is also inevitable. Annual visitors to the Brazilian side of the Iguacu falls exceeds one million.

However much a principled definition of ecotourism is advocated, it must be recognized that so-called ecotourists are not an homogeneous group. The spectrum of participants embraces hard-core nature tourists through to casual day visitors. Their behaviour and consequent impact will vary accordingly. It is essential, therefore, to attempt to match numbers and types of ecotourists with destination characteristics.

Paying for conservation

Willingness-to-pay surveys of ecotourists across the globe show a consistent response of $10 as a reasonable visitor's fee. Certain unique sites, or those harbouring more charismatic species, can support higher fees. The Mountain Gorilla Preserve in Rwanda charged $170, the Galapagos $80. Indeed, the pricing mechanism may be used to regulate numbers. Tourists visiting Bhutan, limited to 5,000 a year, have to spend $200 a day. The potential revenue for conservation is therefore evident, but often not realized.

Where the fee falls below the amount visitors are willing to pay, the capability to contribute more fully towards conservation remains latent. The 1995 entry fee for Taman Negara was equivalent to only US35c; even the proposed tenfold increase to Malay$10 will be below the average amount visitors would be willing to pay. Local differentials must apply, however, so that locals are not excluded. Madagascar National Parks, for example, charge foreigners $11, nationals 50c.

It is also necessary to ensure that a proportion of revenues accrues locally. Percentages of revenues directed towards conservation vary between sites. Often high proportions end up in central treasuries. In Rwanda the proposed allocation of 5 per cent of tourism receipts (or approximately $40-50,000 a year) towards local communities at the Mountain Gorilla Project was never implemented. There are, however, instances where such earmarking has occurred. At the Kibale Reserve in Uganda 75 per cent of all tourism profits are directed to local communities, the remaining 25 per cent to forest department management costs.

Blowpipe tuition under Yagua chief, Aceer rainforest reserve, Peru

Michael Doolittle/Still Pictures

The challenge

The major role players in ecotourism all have a stake in its sustainable development. Their present and future interests are, in many ways, tied to one another. Given the multitude, and diversity, of stakeholders a completely sustainable outcome is, however, likely to remain elusive.

The grand challenge is to reconcile sometimes complementary, but often conflicting interests. The essential dilemma is to balance demands of ever-increasing 'new-tourists' escaping from the confines and pressures of urban life, and reacting against the characteristics of mass tourism with the needs of the environment, the aspirations of tourism organizations, and, most importantly, the basic needs of the local population.

Although a win-win scenario, where all interests gain, is the ideal outcome, there will often be situations where one interest may gain at the expense of another. National Parks, for example, may bring benefits for conservation and for visitors, but the local population is likely to lose out if they are excluded from their traditional activities.

The situation is fraught with discontinuities. A win situation for one interest in a particular place at a specific point in time is likely to be a loss for another. For example, at Lao Pako ecotourism lodge in Laos, the cost of installing environmentally benign solar panels, together with imported maintenance-free heavy duty batteries, could have employed two locals for ten years to maintain a more conventional generator. The enterprise is also unlikely to break even for at least another year.

It is necessary, therefore, to recognize conflicts and identify relative costs and benefits. Arriving at the most sustainable outcome is likely to involve trade-offs. It is unlikely to be optimal either environmentally or developmentally, but, in the circumstances, it will be the most feasible and most practical. And, hopefully, ecocide will be circumvented. ■

Dr Erlet Cater is a lecturer in the Geography Department, University of Reading. *Ecotourism: a Sustainable Option?* was co-edited by Gwen Lowman and published by RGS/John Wiley, 1994, £37.50

Creating heaven in the Virgin Islands

Stanley Selengut is a 65-year-old New York developer and civil engineer who, 23 years ago, decided that it would be nice to slow down and build a few tourist cottages in the United States Virgin Islands where he could live simply and invite a few friends.

Today he is acknowledged as one of the fathers of 'ecotourism', the founder and owner of four ground-breaking eco-friendly beach resorts on the island of St John, and a partner with the US National Parks Service in developing models and designs for future ecotourist resorts.

It began at Maho Bay where Stanley Selengut put up 18 tented cottages, cantilevered over the hillside, with walkways to the beach to protect the vegetation, and with solar powered lighting, wind generators and vegetables grown from treated sewage.

In a sparsely populated island, half of which is a national park, the need for sensitive development was clear. But with the hardwood already felled and much of the soil eroded, Selengut began a process of ecological restoration: bringing back native species and aiming to create a balanced ecosystem. There are now 114 units at Maho Bay and the environment is in better shape than when he began, says Selengut.

Next came Harmony, a cluster of studio apartments that were built with recycled materials, using wood scraps to make composted beams, recycled newspapers for floor decking and waste cardboard and cement for roof shingles. Floor tiles were made from ground-up glass bottles and outside decking from recycled car tyres.

Subsequent developments have been a touch more luxurious than Maho Bay, but the latest, The Concordia Eco-tents, are completely self-contained in their use of energy and waste. Guests monitor the composting lavatories to make sure they are topped up with vegetable waste or with sufficient water.

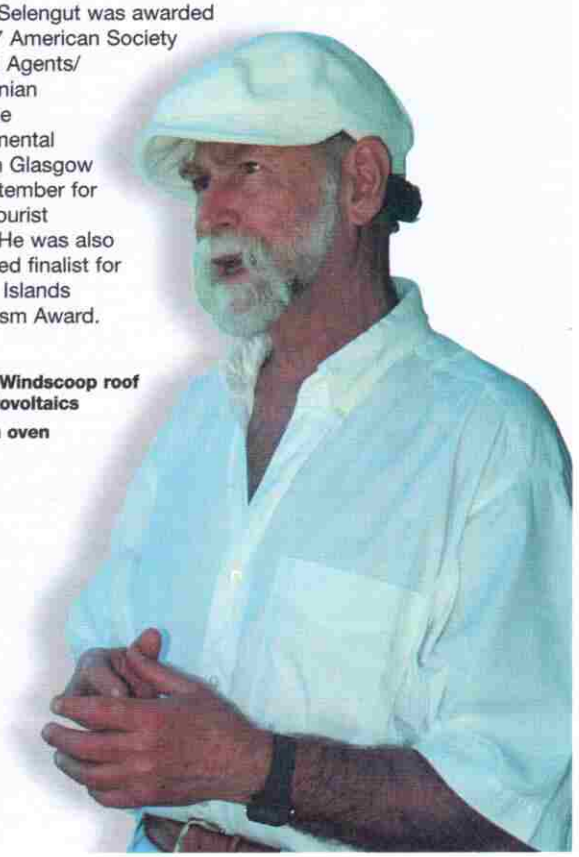
The tented accommodation is clustered in different groups depending on the availability of wind, water and sun, and divided by green fingers of vegetation.

In the design guidelines for ecotourism resorts developed with the National Parks Service, the long term aim is to minimize resource consumption on a global scale and to become a model for global education. It follows that the sustainable building design must be to 'lead through example' to heighten environmental awareness. So education is part of the tourist package.

That all sounds very worthy, but as Selengut remarks: "Our visitors must love it: they keep coming back." ■

John Rowley

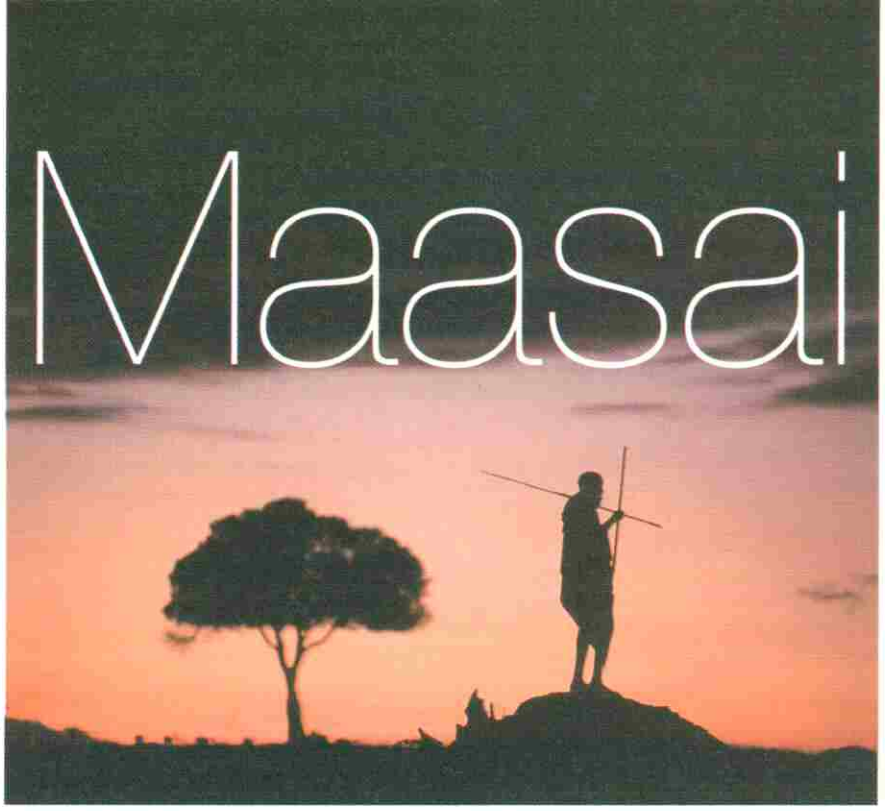
Stanley Selengut was awarded the 1997 American Society of Travel Agents/ Smithsonian Magazine Environmental Award in Glasgow last September for his ecotourist resorts. He was also the named finalist for the1997 Islands Ecotourism Award.



Top left: Windscoop roof and photovoltaics

Left: Sun oven

Maasai hop



Fritz Polking/WWF

Nowhere is the clash between tourism and the wellbeing of local people more obvious than in the East African rangelands which are, at once, the traditional homeland of the Maasai people and a wildlife magnet to tourists from all over the world. **David Lovatt Smith** talked to **Paul Ntiati**, a Maasai leader from Kenya, about the problem – and possible solutions.

On 1973 the Maasai people were evicted from Amboseli National Park by government decree and since then they have been excluded from the area which covers some 150 square miles of their former grazing lands.

Today the rest of the Amboseli ecosystem, covering about 1,850 square miles is owned and ranched communally by some 25,000 Maasai who remain bitter at the loss of what was an important dry weather grazing and watering place for them.

Despite many promises of compensation, it was not until 1993 that they received any direct benefit from the many tourists visiting and staying in the Park. Since then they have received a fixed cash handout from the Kenya Wildlife Service (KWS) which runs the National Park. But, for 20 years, they did not have a penny of compensation for the loss of their land.

The community came to resent the Park and the 'government animals' that wandered into their grazing area at certain times of the year. As a result, Amboseli's wildlife declined at an alarming rate. Some species, such as lion and rhino, disappeared altogether, although a small pride of lions has since returned there.

Recently, things have begun to change. A new enlightened leadership within the community and a change in the Directorship of the Wildlife Service has altered the way that the wildlife is viewed. The Maasai are beginning to see the value of protecting wildlife and setting aside areas within their own lands for wildlife conservation and tourism.

One of those leaders is Paul Ntiati, who has mixed feelings about the future.

"We have to be hopeful" he says, "but to the Maasai there is a positive and a negative value to wildlife conservation. Before, we used wild animals for sport and for carrying on our traditions."

He relates how many of the traditional proverbs and folk stories centre around wildlife. "Many of our songs are about wild animals and the beauty of them. Even now in daily diet we use a great many herbs from indigenous plants that grow on our grazing lands. But there is a big difference now.

"Before, when we were masters of most of southern Kenya, we used to look upon wild animals as our own. Now, we are told that they belong to the Government. That makes us resent their presence. We have to put up with someone else's property on our grazing lands and when they kill our livestock and we are not allowed to kill them, it makes us angry.

For the last four years the Maasai have received some money, as a share of the Amboseli tourist revenues. But they believe this hand-out is not sustainable.

"The trouble," says Paul Ntiati, "is that the KWS has a different agenda to the communities. The KWS are only interested in preserving wildlife, and when they found out that 70 per cent of Kenya's wildlife exists outside the protected areas, they thought they'd better do something to keep us sweet. So they gave us some money. But we are more interested in grazing, watering places and salt licks. These are our growing fields, our livelihood."

I asked Paul whether the community realized the potential value of the wildlife in their midst as a resource which could be used to bring them income. "They do," he replied. "But my fears are that if we designate specific areas within our ranches for wildlife sanctuaries, the government will come along one day and take them from us as they did with Amboseli, saying that these wildlife areas are a national asset, so the nation must control them".

I suggested to him that if areas were not set aside for conservation, now, the wild animals will soon cease to exist, because Amboseli National Park is too small on its own, to preserve the wildlife. He agreed and said that if the

Top: Maasai tribesman
Right: Maasai blowing Kudu horn
Below: Maasai farmers
Top right: Tourism in Maasai Mara

Betty Press/Panos Pictures

es and fears

wildlife of the Park could not migrate into the Maasai lands at certain times of the year they would die and both the nation and the Maasai would be the poorer for that.

"But there is another problem we conservationists have to confront," Paul went on. "We are being pressurized by the government to sub-divide our land. At the moment the land is communally owned by seven different Group Ranches extending to areas of up to 100,000 hectares each, and we can graze cattle anywhere within them, making the best use of the grazing. If sub-division comes, it means that each Group Ranch will be divided into tiny ranches of a hundred acres or so, and the individual owners will be allowed to put up fences, start cultivation, build houses and even sell the land. This will also mean the end of the wildlife.

"For myself," he concludes, "I believe the future of the Amboseli Maasai lies more with wildlife tourism and pastoralism, than it does with dry-land cultivation and pastoralism. We know that wildlife and pastoralism can exist side by side, but we have to educate the people and tell them what their alternatives are. It is very difficult to persuade someone whose family and children rely on cattle for their livelihood to set aside areas for wild animals which do not belong to them and which can kill their livestock and even themselves, sometimes. We have to persuade them that they will actually be better off with wildlife tourism."

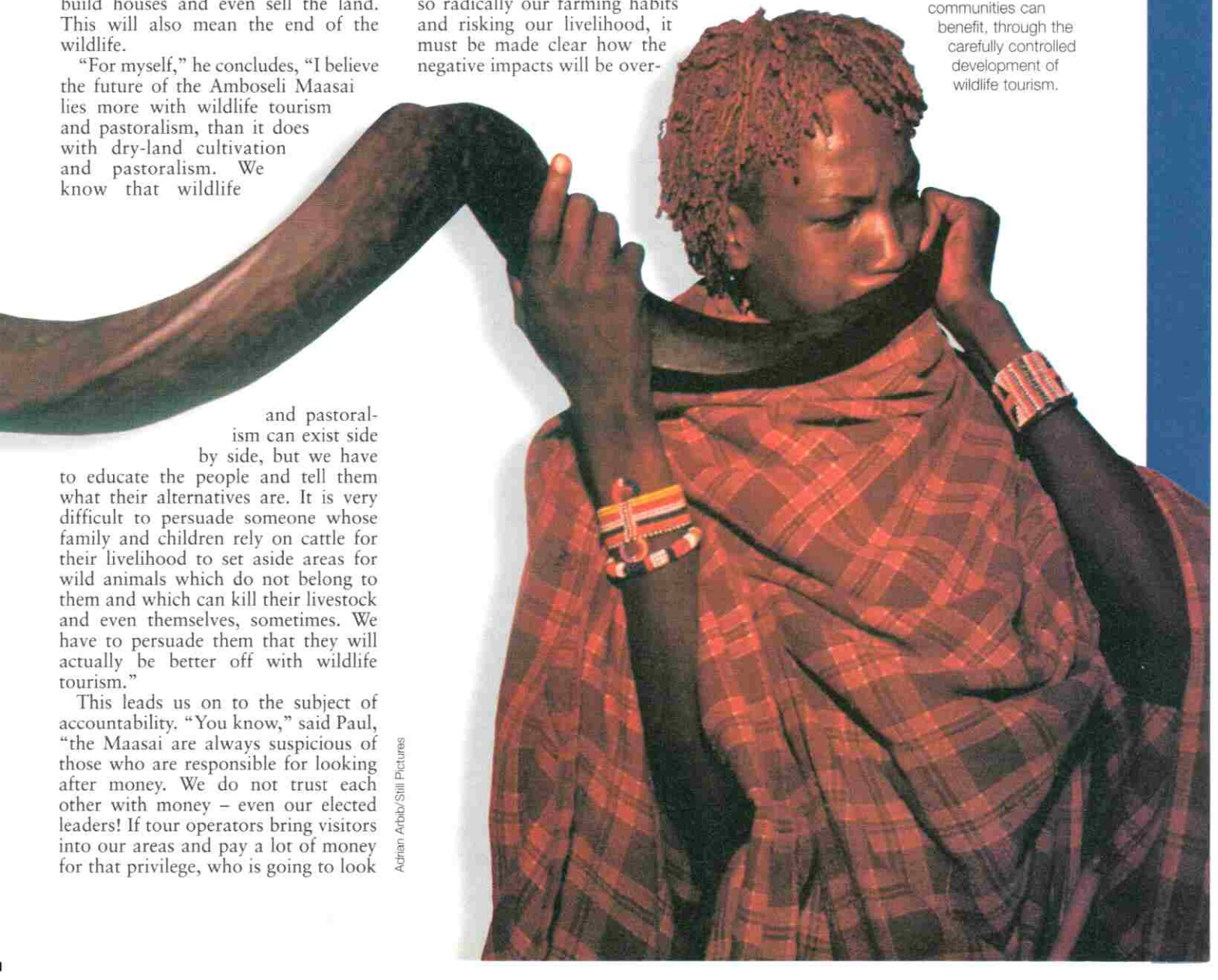
This leads us on to the subject of accountability. "You know," said Paul, "the Maasai are always suspicious of those who are responsible for looking after money. We do not trust each other with money – even our elected leaders! If tour operators bring visitors into our areas and pay a lot of money for that privilege, who is going to look after that money? Who is going to be accountable? How do I know that I will get my fair share? All these questions will need answering before the communities will agree to tourism."

He agreed that tourism would bring employment to the area, and that if the hotels or tour operators were contracted to employ only local people in preference to outsiders, it would have a big impact on the communities' decision to allow tourism. "If my cattle are going to be restricted in their grazing areas, but am I going to make up my losses through employment, then that is a good balance," he said.

"Most of all it is our culture we must protect. Before the people will agree to opening up our land for wildlife tourism, thereby changing so radically our farming habits and risking our livelihood, it must be made clear how the negative impacts will be overcome by the positive ones. If we can be sure we shall be better off by changing, then we shall welcome tourism." ■

Penny Tweedie/Panos Pictures

David Lovatt Smith is a former warden of Amboseli. He is advising the communities at Amboseli on the use of their wildlife resource and is helping to set up sanctuaries outside the National Park, in areas that still hold good stocks of wildlife, from which the local communities can benefit, through the carefully controlled development of wildlife tourism.



Adrian Arbib/Still Pictures

Hartmut Schwarzbach/Still Pictures

Can trekkers

As trekking in the Nepalese Himalayas grows in popularity, the balancing act between tourism and conservation gets ever-more difficult. Here, **Manesh Shrestha** reports on the dilemmas caused by opening up the remote Manaslu range to organized groups.

Trekking in Nepal has come a long way since February 1965 when a group of three American women went on an organized trek from the outskirts of Kathmandu to Tengboche monastery in the foothills of Mount Everest. Today more than 40,000 foreign visitors walk in the Himalaya every year admiring the majesty and beauty of the world's greatest mountain range.

The Himalaya stretches across the nearly 900 kilometres length of northern Nepal but only three areas are popular with tourists – the Khumbu region in the east where lies Everest, the Langtang National Park in central Nepal and the Annapurna area in west Nepal, with the last topping the list.

Other than the fact that trekking in this ruggedly mountainous country is a strenuous exercise involving several hours of walking up and down Himalayan valleys every day for weeks, one other factor has limited the growth of this adventure sport. There is little infrastructure in this country – one of the poorest in the world.

Except in the more popular routes, trails are in poor condition, acute deforestation has led to frequent landslides, boarding and lodging facilities are poor and clean drinking water is not always available. Yet, because tourism is the country's second highest foreign exchange earner (after carpet exports), contributing nearly four per cent of the gross domestic product, the government is keen to attract more tourists.

Trekking route

The remote and hitherto restricted Manaslu area named after the world's eighth highest peak was opened for 'organized' trekking in 1991. Organized is the key term here. While trekkers can walk in the more popular areas all alone and sleep and eat at tea houses along the way, those trekking in Manaslu must travel in groups and must have their food arranged for by Kathmandu's trekking agencies as there are no tea houses or lodges for tourists along the three-week trekking route.

There are other restrictions. Fuelwood may not be used to cook food and kerosene or other alternative energy need to be used. Since there are no shops along the trail, all kerosene must be carried from Kathmandu or the nearest town in the lowlands. The same applies for foodstuffs. Says a government official, "These measures have been taken so that tourists do not put on added pressure to the fragile environment of the region."

All rubbish produced on the trek must be burnt and buried. Empty bottles and tin cans are usually brought back to the town where the trek ends. Says Iman Gurung, a trekking guide, "We guides know about cleanliness and the need to protect the environment." Since there are no toilets in all of the Manaslu region pit latrines are dug for the foreign trekkers.

Besides Mount Manaslu (8,163m), this extremely rugged region has a host of other peaks like Himalchuli (7,893m), Peak 29 (7,871m) and Baudha (6,672m). There are many glaciers and glacial lakes as well which are a major attraction.

A government-appointed environment officer accompanies the trekking groups to Manaslu to ensure that the regulations are followed. Trekkers have to sign a pledge before trekking permits are issued. The first sentence reads, "We shall keep clean the trekking route and environment."

The Manaslu region is rich in biodiversity. The lowlands and deep valleys have riverine forests of sal and pine trees. The higher altitudes have

help Manaslu?

conifer, birch, larch and fir forests and finally junipers and alpine meadows. All within a 100-kilometre trail.

According to one study there are more than 200 species of plants, 11 types of forests, more than 50 species of valuable medicinal and aromatic plants; 29 species of mammals, above 20 species of birds and three species of reptiles. Villagers have reported sightings of musk deer, blue sheep, snow leopard, black Himalayan bear and red panda among other animals, says a study conducted by the Kathmandu-based International Centre for Integrated Mountain Development.

Who benefits?

In the tightrope walk between tourism and conservation the government's efforts may deserve some recognition. But who does tourism in Manaslu benefit?

The trekking agencies based in Kathmandu charge trekkers to Manaslu anything between US$50-100 each per day for full board and guides. The trekking agencies buy all provisions in Kathmandu. "We have no other option since there is hardly anything available on the trekking trail. Sometimes vegetables are available but there is no guarantee," says Padam Singh Ghale, who runs a trekking agency in Kathmandu. Even the porters are from the lowlands.

Kanak Mani Dixit

Local children greet trekkers in Manaslu region, Nepalese Himalayas

"Highland porters want to be paid for the days taken to walk back to their villages when the trek ends in the lowlands," says Ghale.

One income the villagers on the Manaslu trail get is from the one dollar they charge for each tent pitched at the campsites along the way. Another is their earning from what porters spend. They eat in the tea shops or at villagers' houses along the way and, when possible, sleep there.

But this comes at a price. The porters' meals are prepared from fuelwood which comes from the trees felled in the area. Every trekker has at least two porters with him and they carry everything, from the (mem)sahib's toilet paper to chocolates. In 1995, 677 trekkers visited Manaslu. This means around 2,000 trekkers went trampling along to the area which in 1992 had a population of only 6,280.

Subsistence agriculture is the main occupation of the Bhotias (people of Tibetan origin) who live here. According to a 1992 survey carried out by the German development agency, GTZ, only 12.5 per cent of the populace produce enough grain for the year. Off-farm employment opportunities like portering and other wage labour are few and far between.

Trekking agencies, meanwhile, make 15-50 per cent profit from what they charge trekkers. And while each trekker pays US$75-90 for a week's trekking permit to the region, none of this goes directly to the area's development.

In contrast, trekking permits to other areas costs US$5. In addition trekkers must pay Rs 650 ($12) to enter Langtang and Everest national parks and 30-50 per cent of this is spent for the area's development as the law stipulates. In the case of Annapurna conservation area visitors are charged Rs 1000 ($18) each, all of which legally goes to an endowment fund for the area's integrated development. The government plans to declare Manaslu a conservation area but no one knows when that will happen.

Ecotourist plan

To tackle this situation, the government this year began a five-year Manaslu Eco-tourism Project (MEP). "We want to build tourism infrastructure, help the local community benefit from tourism and at the same time help the conservation of environment," says Ghana Shyam Gurung, chief of the project. "At present, villagers lack even the awareness to protect the environment."

Syala, a settlement on the trail, for example, had a beautiful forest a few years ago but now five hectares have been cleared of trees. In this region, whole houses, from the roof to the floor are made of wood. Any other construction materials must be bought in the nearest town which is several days' walk away.

Peter Barker/Panos Pictures

Left and above: Organized trekking in the Nepalese Himalayas puts pressure on the natural environment

"Only high volume tourism, say 5,000 trekkers per year, will benefit the local community," says Gurung. But at present the government allows only 1,500 tourists per year in the area. The MEP will work toward increasing the "carrying capacity" of the region.

To begin with, vegetable gardening, poultry and handicrafts based on forest produce are some of the income-generating activities that the local residents will be trained in. MEP also has plans to train local guides so that trekkers learn from the area's rich cultural heritage of Tibetan Buddhism. Community-owned lodges will be opened and management, cooking and other training will also be provided. The project will also look into the possibility of refurbishing parts of the villagers' homes into lodges for tourists.

However, it is not only in tourism promotion that MEP will be contributing. "Our approach is an integrated one," says Gurung. Three micro-hydel stations are also in the pipeline as is construction of health posts, toilets and drainage systems. "Our biggest asset will be our experience," says Gurung. MEP is a project operated by King Mahendra Trust for Nature Conservation, a body which has been involved in the highly successful Annapurna Conservation Area Project for sustainable tourism.

It is obvious that though the government's decision to impose restrictions on trekking groups to Manaslu was well intentioned, it was not enough for success in sustainable tourism. The impoverished locals have not benefited and that has led them to question the decision to allow tourists into the area. MEP will hopefully make them believe that tourism will help improve the quality of their lives without damaging the precious environment of the pristine Manaslu region. ■

Manesh Shrestha is a staff writer with the Kathmandu-based *Himal* magazine.

Possibly the world's least likely venue for popular tourism, Antarctica is an ice-bound wilderness far removed from civilization. Yet even here tourism pressures are building up, as **Bernard Stonehouse** reports.

Colin Monteath/TCS

Small is beautiful in the planet's crystal wonderland

Explorers in the 19th and early 20th century returned from Antarctica with stories of ice, blizzards and bitter cold. Dangers abounded and heroics were essential: with no human population of its own, Antarctica was a continent for real men. Tourists were unthinkable.

Tourism began, however, in December 1956, when a sightseeing flight circled part of the continent, and in January 1958 when the first cruise ship entered Antarctic waters. Both were successful ventures, displaying a harsh but rewarding wonderland of ice, snow and wildlife. Yet Antarctic tourism was slow to catch on. Distances were great and costs proportionately high. Few South Americans were rich enough to take part. North Americans and Europeans had to travel half the length of the world before starting their Antarctic voyage.

Lars Eric Lindblad, a Swedish-American entrepreneur, specializing in adventure travel, began regular cruises in the southern summer 1966-67. Others followed his lead, and ship-borne tourism to Antarctica is now well established. Overflights, never so popular, have a more fitful history, tinged with the tragedy of a fatal crash in November 1979 that cost the lives of 257 passengers and crew.

Today Antarctic cruising is widely advertised. The season runs from early November to early March – approximately 18 weeks in which the seasonal pack ice surrounding Antarctica retreats, and snow disappears from some of the coasts. The continent basks in a brief, cool summer; temperatures run close to freezing point, and there are possibilities of one or two warm, sunny days – though seldom more – in a ten-day vacation.

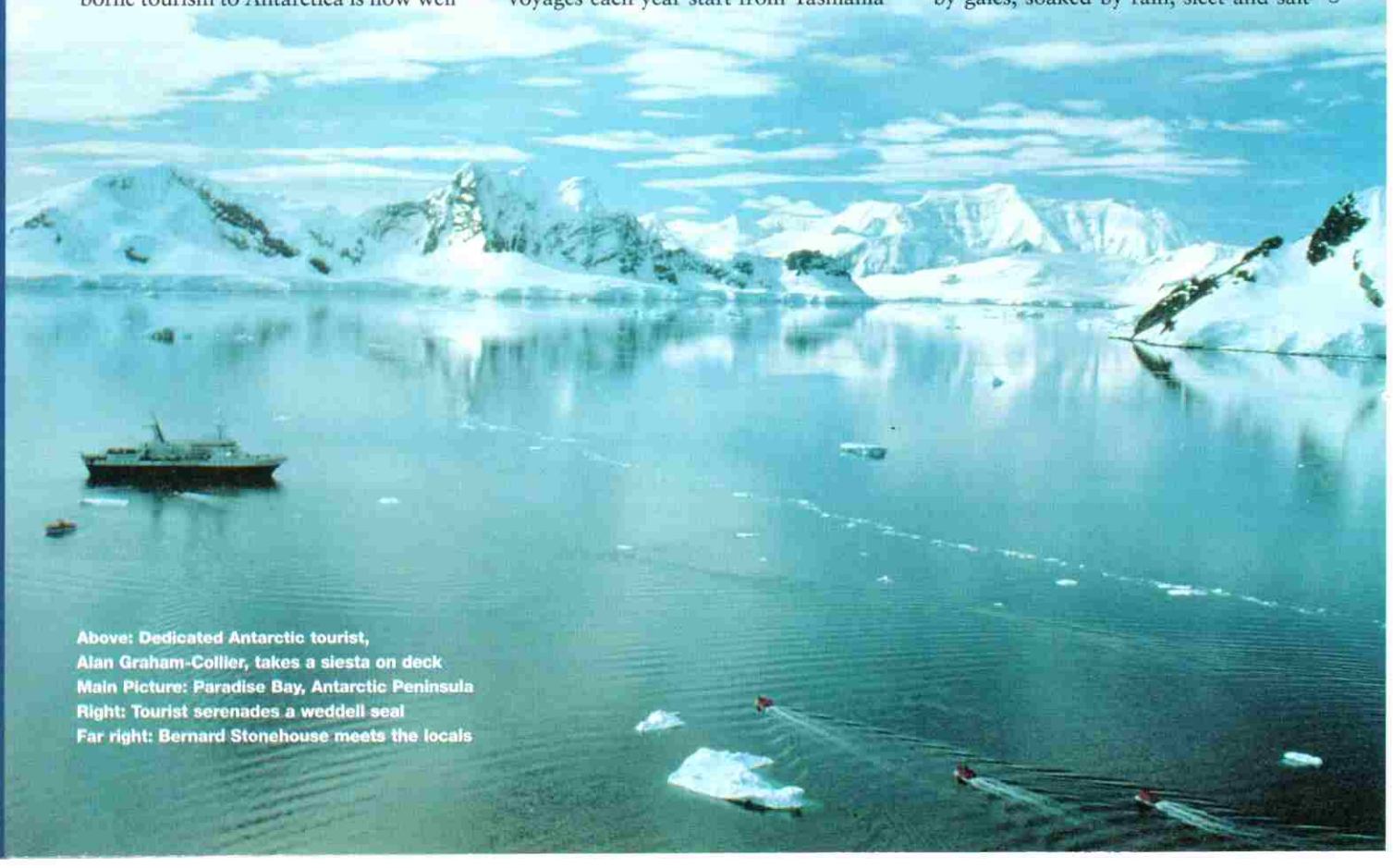
Currently about 120 cruises visit Antarctica each year, carrying some 9,000 tourists – a tiny number compared with even the daily tally in a sizeable national park. Most voyages take eight to 15 days, starting and ending in Ushuaia, the world's southern-most city in Argentine Tierra del Fuego. Alternative posts in the South American sector are Punta Arenas, Chile, and Stanley, in the Falkland Islands. A few voyages each year start from Tasmania or southern New Zealand, to visit the Ross Sea sector of Antarctica.

A very few tourists reach Antarctica by air. Each year small parties of climbers, adventurers and professional photographers take relatively expensive airborne tours to inland mountains or almost any other point in Antarctica, including the South Pole itself. They fly from South America, South Africa or the Antipodes, land on snow or wind-polished ice runways, and live in simple but well-organized camps, trekking, climbing and photographing for two to three weeks in a luxury of complete isolation.

A shipborne cruise in Antarctic waters bears little resemblance to the average Caribbean or Mediterranean luxury cruise. Comfort, even luxury, there may well be on board, but above decks or ashore Antarctic tourists must be ready for foul weather, harsh conditions and a measure of danger.

Woollies, hooded parkas, waterproofs and wellies are recommended wear. Running ashore in inflatable boats, passengers are liable to be huffed by gales, soaked by rain, sleet and salt

Colin Monteath/TCS



Above: Dedicated Antarctic tourist, Alan Graham-Collier, takes a siesta on deck
Main Picture: Paradise Bay, Antarctic Peninsula
Right: Tourist serenades a weddell seal
Far right: Bernard Stonehouse meets the locals

spray, and tumbled by surf on exposed landings. Ashore they scramble over rocks and cobbles, wade ankle-deep in penguin guano, stagger across windswept stony deserts and stumble through snowfields. Almost all enjoy every minute of it.

What are the attractions? We have asked many hundreds of tourists, and found that practically all, especially in the South American sector, are turned on by the splendid alpine scenery, the glaciers, the icebergs and floes. Even more they appreciate the wildlife – the penguins in their breeding colonies, the albatrosses and swarms of lesser petrels, the skuas, gulls and terns, the seals and whales.

Nearly all have an ear for the history of exploration: a chief attractions of the New Zealand sector is to visit historic McMurdo Sound and the huts of the Scott and Shackleton expeditions.

The dozen or more tour operators working Antarctica belong to the International Association of Antarctica Tour Operators (IAATO), which binds both operators and clients to high standards of environmentally-benign behaviour. All operators tend to follow the pattern set originally by Lars Eric Lindblad. Each cruise is an expedition and tourists are expeditioners, visiting a little-known part of the world in the company of experienced guides. Staff lecture on the history and natural history of the region, accompany the passengers ashore, and are always on hand to explain or discuss.

This is good practice, which fortunately helps to sell tickets. Antarctic cruises have little appeal for environmentally insensitive tourists. Already disposed to be protective, Antarctic shipborne tourists receive thorough briefings and indoctrination aboard, and are kept up the mark by their guides (and indeed by each other) during their shore visits. It is as well that the tour operators undertook environmental responsibility from the start, and even better that they find it advantageous to continue.

Governance of Antarctica rests with the Antarctic Treaty System which, though politically admirable, has been slow to respond to the challenges of a developing industry. Hampered by absence of sovereignty, the System is gradually coming to grips with problems of environmental protection. Even now it has little capacity for managing or protecting the 200 or more sites where tourists land, far less for managing in any sense the industry as a whole.

Some Antarctic scientists and administrators oppose tourism because they fear it will interfere with science, to which they have dedicated the continent. Some conservationists oppose it because they fear that tourists are already trampling vegetation, disturbing wildlife and spreading litter, and must continue to do so on an increasing scale. Our Cambridge-based group has for seven years studied the growth of Antarctic tourism, especially its impacts on Antarctic flora and fauna.

In general, we have found a well-run industry, living up to a sound record for environmental concern, led by a professional association that promotes sound environmental practices. Both operators and tourists accept IAATO-inspired guidelines as sensible and workable.

We have worked with a dozen or more responsible tour operators and a few that were less responsible. Cutting costs by reducing crew and field staff, we found, was the single fault most likely to bring problems both to the industry and to the Antarctic environment. We have urged IAATO to increase inspection of its members, and be more ready to apply sanctions when performance slips.

We have recorded much damage to beds of moss and other vegetation due to breeding seals and similar natural causes, noting how quickly they recover. We have found very little such damage due to tourists, who are warned to avoid walking on vegetation and usually take care not to. We are setting up long-term study plots to study growth of vegetation and compaction of soils, which hold the as yet undiscovered key to a controversial issue.

Colin Monteath/TCS

We have found no litter due to tourists. Sadly, there is plenty due to the scientists and support staff to whom Antarctica is dedicated. They are only now beginning to clean up after themselves – prompted roundly by the complaints of tourists and conservation groups.

We have monitored heart-rates of incubating penguins to measure disturbance, comparing stresses due to visiting tourists with those due to neighbouring pairs and predators that penguins encounter in everyday life.

Even frequent visits by well-ordered tourists, who keep the prescribed distance of five metres from birds, cause virtually no stress. So far we have detected no measurable effects on colony size, breeding behaviour, breeding success, or levels of interaction by predators. Some other breeding species of birds – for example gulls, terns and possibly giant petrels – are more twitchy in the presence of human visitors, and need special care when tourists are about.

Seals too seem largely indifferent to the presence of human visitors who keep their distance. We conclude that tourists who use common sense and observe the guidelines exert little impact on wildlife. The few who do not, need to be kept under strict control – much stricter control than seems currently possible.

We have assembled data on more than 200 tourist landing sites and studied the 40-or-so most popular ones in detail. Most are undamaged by visits from several thousand tourists each year. In only a few are we starting to see signs of wear and tear – notably paths across barren ground that persist from one season to the next. Elsewhere in the world we would expect a management authority to step in and rest these overused sites. In Antarctica we draw our findings to the attention of IAATO: fortunately the tour companies and cruise leaders find it in their own interests to avoid sites where damage is patent.

We find few efforts by authorities ashore to welcome, educate or inform tourists, which seems to us a seriously-missed opportunity. We are currently working towards an information and education centre at Henryk Arctowski, a Polish research station, where tourists can learn more of Antarctica, and we can learn more of tourists.

In general terms, we are satisfied that tourism as it is currently practised in Antarctica is environmentally sustainable. It stands a chance of remaining so for as long as the industry remains small and mainly shipborne, continuing its current codes of practice, with environmental sensitivity an important selling point.

Should numbers increase threefold or more, should land-based tourism proliferate, should shifts in practice alter the ethical basis of the industry, it will not, as some environmentalists seem to suggest, mark the end of Antarctica as we know it. Parts of the Antarctic environment will be at risk, and remedies – including more realistic forms of environmental management – will need to be found. ■

Dr Bernard Stonehouse leads the Polar Ecology and Management Group at the Scott Polar Research Institute, University of Cambridge. He has spent four winters and many summers in Antarctica and on the Southern Ocean islands, and is currently leading a seven-year field study of Antarctic tourism. He has written *A Travellers' Guide to Antarctica*, shortly to be published by Harold, Martin & Redman.

Colin Monteath/TCS

South Africa's new goldmine

Nelson Mandela may be South Africa's political saviour, but it is tourism that is widely seen as the backbone of the country's financial future and a way to fund social-development programmes. **Caroline Wheal** reports on projects for sustainable tourism – especially as they affect wildlife and people.

Since the elections of 1994 ended a decades-long struggle for human rights and put South Africa back on the map as a tourist destination, the number of visitors has risen dramatically. In 1996, the South African Tourism Board reported that almost 5 million people visited the country. More than a million of those visitors came from overseas and brought R12.5 billion (US$2.7 billion) in foreign currency with them.

According to one survey, scenic beauty and wildlife are among South Africa's biggest draw cards. Together with a stop in Cape Town, the average foreign tourist's two-week trip invariably includes visiting one of the country's state or private game reserves. Although 'ecotourism' has become an elastic term, stretched to describe just about any outdoor experience, paying to look at wild animals is a legitimate example.

The Kruger National Park, at almost two million hectares, is one of the biggest and best-known reserves in the world. It was born in 1897, when President Paul Kruger, concerned about the number of animals being killed made the area between the Sabie and Crocodile rivers into a reserve.

Creating wildlife reserves by fencing animals in and people out may have worked 100 years ago but today's runaway population growth, extreme rural poverty, plus new attitudes in South Africa mean that the 'higher fences, bigger guns' strategy is no longer acceptable or effective. Like many other colonial practices, the old way is doomed, say those involved in conservation.

There's a prickly tree in the bush known as the buffalo thorn, *Ziziphus mucronata*, that Zulus believe holds sacred power. The tree has two distinct types of thorn: one curved like a talon facing backwards that signifies the past, the other pointing straight ahead to the future. Its message? Let lessons learnt yesterday guide what you do tomorrow.

Game parks today must somehow balance the survival of wildlife and that of the impoverished people around them – people whose traditional hunter-gatherer means of existence was curtailed when white settlers started marking off territory with fences.

"After all, the wildlife was stolen from them in the first place," says Dr John Ledger, director of Endangered Wildlife Trust, South Africa's leading conservation society.

For reserves to last, the people who have been shut out need to see them as a benefit, not as playgrounds for a small group of rich whites from which they are excluded.

"At the end of the day, if Africa's wildlife heritage is seen as useless by the people, there will *be* no heritage," warns Ledger.

Protecting parks

Perceptions may be hard to change. Before the 1994 elections, some African National Congress politicians questioned the relevance of national parks to the majority of South Africans and suggested abolishing them in favour of "more productive" land use (probably grazing cattle and growing maize). Although President Mandela has so far defended parks for their potential to attract visitors and earn foreign exchange, they will have to earn their keep in the New South Africa, where basics such as clean water, housing, schools and hospitals are vying for limited funds.

"National parks need to become the pride of *every* South African," says Rams Rammutla, a director of operations for South Africa's National Parks Board (and the first management-level black African in what was until recently an almost all-white, Afrikaans-speaking government agency).

Rammutla has no time for aesthetics when discussing the future of the country's wildlife. Sounding more like an economist than a conservationist, he talks about the need to make animals both relevant and valuable to peripheral communities. A leaping impala is a beautiful sight but it won't contribute to people's survival unless they can eat it – or if tourists are paying to see it and spending money on accommodation, food, transportation and souvenirs at the same time.

"Wildlife is a magnet," says Rammutla. And the spin-offs of its attraction – hotels, curio shops, petrol stations, roads, electricity, telephones and emergency services – will benefit locals for much longer than the meat of an impala. "I'm very positive...once people understand the possibilities, they will voluntarily protect the parks."

Trophy hunting

Michel Girardin, Director of Operations at Sabi Sabi Private Game Reserve, makes no excuses for the often-criticised cost of staying at a private lodge, citing the fact that more people paying less would not generate enough income to maintain the reserve, and that the extra facilities would take a higher toll on the area. "We can't lose sight of the fact that we're running a business," he says. "The only way conservation will survive is by making it profitable."

Ledger agrees. He favours anything that adds value to wildlife – and that includes controversial trophy hunting. Repugnant as the idea may be to those who cannot fathom shooting an animal with anything more than a long lens, some hunters will pay big money to kill an elephant, rhino or buffalo. If the animals are marked for culling (a necessary evil to ensure that parks don't exceed their carrying capacities) and taken during carefully monitored safaris, Ledger believes that hunters have a role to play in the wildlife conservation drama. In the case of Zimbabwe's famous CAMPFIRE programme, rural villages allow hunters to shoot trophy animals on their communal lands to generate money for development projects.

Rammutla calls communication "the lubricating oil of the system." But there are hurdles to clear before even that can be established. There's a deep-rooted distrust of white men and their "deals," built up over 400 years of oppression. Local communities were often forced off ancestral lands and then barred from access to the resources inside when the fences went up.

But there have been some breakthroughs. The relationship between managers of the Addo Elephant National Park in the Eastern Cape and residents of the neighbouring Nomatamsamqa township has improved dramatically through formal committee meetings. Poaching, illegal wood-gathering, fence-pole theft and open hostility towards park rangers have been replaced by agreements that allow the community to benefit from the annual kudu culling, use discarded building materials and plan a craft market at Addo's main entrance.

Thanks to community forums, relations are also less strained between the Kruger National Park and its surrounding villages. With help from two development corporations, local entrepreneurs are providing the park with brooms, linen and staff uniforms. A group of local taxi drivers has been trained as tour guides and will be able to compete for business at the park's camps. A plant that processes culled animals employs locals. There's a children's environmental education programme in the works, and two art associations have been set up to sell locally made curios in and around the park.

Profit sharing

It isn't only national parks, with their accountability to the public, that are changing.

Conservation Corporation Africa (CCA), a company that runs 22 private game lodges in Africa, was founded in 1990 "to promote viable ecotourism opportunities across Africa." These opportunities include adult literacy programmes, setting up rural investment funds that give bursaries for tertiary education, and buying products for the lodges from locals who have been helped to set up in business.

Bongani Mountain Lodge in the Mthethomusha Game Reserve (next to the Kruger) is a model blend of conservation, tourism and community involvement. The lodge is managed by CCA but the land belongs to the Mpakeni tribe, whose chief was primarily responsible for setting up the reserve. The tribe used the land for farming and grazing until 1985, when lack of water and poor grass led them to consider setting the area aside for conservation. Fences were built and game reintroduced the following year. Bongani opened in 1990.

In this instance, tangible benefits for the Mpakeni include profit-sharing; receiving half of the meat from the annual culling; and access to thatching grass, firewood and plants for traditional medicine. Many of the staff have been drawn from the local community, and local labour is used as needed for bush clearing and road maintenance.

Other projects include hydroponic vegetable gardens to provide the lodge with produce, setting up a permanent fruit and curio stall near the park's entrance, and after-dinner performances by a local theatre group.

Opening ears

Witas Mathe comes from a small village near the Kruger National Park called Kildare. In 1987, he started working as a waiter at Sabi Sabi Private Game Reserve, one of the luxury game lodges in the area. Today, Mathe is Sabi Sabi's community development officer, the liaison between the lodge and its two closest villages, Huntinton and Justicia. With a combined population of about 25,000, they are typical of the poor rural communities that exist throughout Africa. In need of basics such as potable water, decent housing and a reliable food source, the outlook for most of their inhabitants is grim. Yet on the other side of an electrified fence lies a bounty of resources: meat, fuelwood and space.

For the past couple of years, Mathe has concentrated on a project called Teach the Teachers of the World, in which local teachers from 90 area schools are brought to the reserve and educated about the benefits of conserving wildlife through ecotourism. So far about 200 teachers have participated in the programme and returned to their classrooms to pass on what they've learnt.

"They can see how operations work and so can understand better," says Mathe.

Mathe says he's noticed a difference in perceptions already.

"People are opening their ears now. They're more aware of the employment possibilities of game reserves."

This awareness has been vividly illustrated recently by what has been called the 'border war' as residents of the town of Bushbuckridge in the Northern Province demanded to be incorporated into Mpumalanga province, land of the Kruger National Park and most of the country's game reserves. Why? The major reason is a desire for a slice of Mpumalanga's tourism pie and all that goes along with it: better roads, services and more chance of getting work (the Kruger alone employs about 4,000 people). Tyre barricades, rocks and petrol bombs were part of the protest, which wrought chaos for tourism in and around the Kruger.

Caroline Wheal/The Cousteau Society

Above: Local ranger with tourist
Below: Elephant watching, Londolozi park

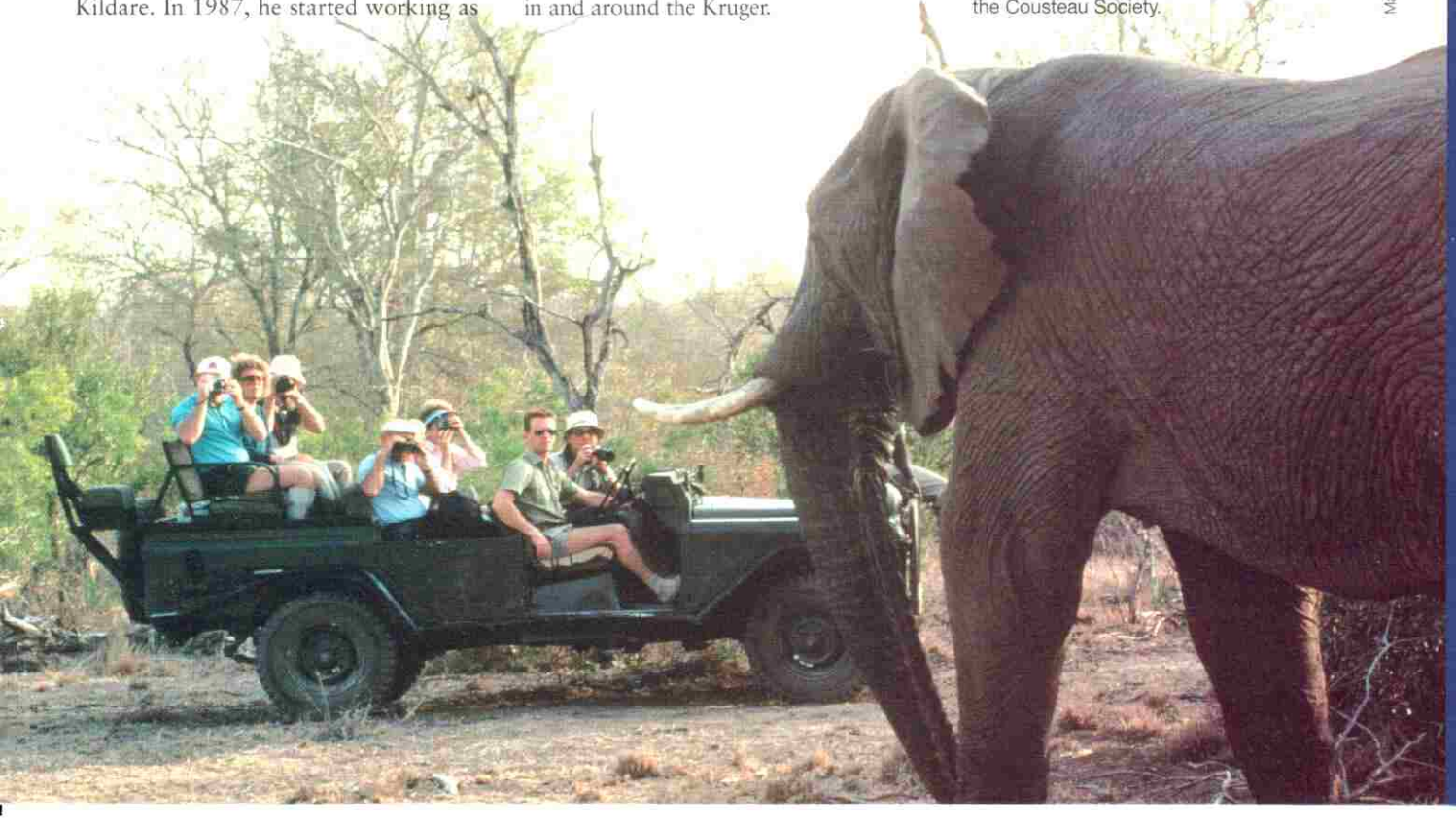
Standard dilemma

But despite its potential, Mpumalanga is not a bottomless pot of gold. More visitors must eventually lead to the standard ecotourism dilemma: How many is too many? When will the number of tourists ruin the very attraction they came to see in the first place?

Africa already has the spectre of Kenya, generally agreed as being overexploited and notorious for surrounding a lion sighting with 20 vehicles. Botswana, with considerable foresight, decided on a 'high-cost, low-volume' approach by raising park entry fees for non-residents, thereby putting off some visitors but maintaining revenue. Which route will South Africa take? The Kruger National Park, which receives about 5,000 visitors a day and is almost fully booked year-round, is considering making some roads into one-way loops and using electric vehicles.

No matter how successful, ecotourism will never be a cure for rural poverty; and no matter how good their intentions, game lodges will never be able to give everyone living on their borders a job. But the prospects for wildlife and people are still much brighter with reserves than without. ■

Caroline Wheal is a freelance journalist based in South Africa and a former staff writer with the Cousteau Society.



Mark Carwardine/Still Pictures

Half of the world's 630 mountain gorillas live in Uganda's remote Bwindi forest, where rich tourists provide essential income to conserve their habitat. **Anna Borzello** travelled to Bwindi to research this report.

Gorillas in the mist

The trekkers turned with their fingers on their lips. Ten feet away, in a small clearing, a Silverback lolled under a low tree, ripping leaves off branches and glancing at us with apparent indifference.

Six tourists stood in silence watching the gorillas as they grazed in trampled vegetation, surrounded by a cloud of flies. Then the Silverback, his huge face turned unblinkingly towards us, led his family into deeper bush.

There are just 630 mountain gorillas alive in the world. Half live in the Virunga Range, which straddles Uganda, Rwanda and former Zaire, now the Democratic Republic of Congo. The rest live 100km south in Uganda's Bwindi Impenetrable National Park (BINP), now a UNESCO World Heritage Site. Some primatologists believe these are a separate subspecies.

Mountain gorillas live in one of the most densely populated and turbulent regions of Africa. The residents are more concerned with survival than in preserving biodiversity for future generations. Last year, Rwandan refugees living in DR Congo cut down seven football-field-size swathes of the Virunga forest a day in their search for firewood, pushing the gorillas up the slopes, where they suffered respiratory problems.

In Uganda, the effects of population pressure have been less spectacular. Until recently, peasants chipped away at Bwindi in their quest for land, while others poached – sometimes inadvertently trapping gorillas in their snares – or extracted timber and gold.

Gorilla tourism, as conceived in Uganda, is a compromise between government, the community and conservationists. The principle is simple: let tourists trek the gorillas and then use the money to make the country richer, the community better off and the conservationists happy.

When President Yoweri Museveni seized power in 1986, Uganda had been through 15 years of dictatorial rule. The economy was shattered. Tourism was pinpointed as a potential source of foreign exchange.

Gorilla tourism, which had been running in DR Congo and Rwanda since the 1970s was, in the words of Uganda Wildlife Authority (UWA) Executive Director, Dr Eric Edroma, "a potential gold mine." In practice, it could have been a conservationists nightmare. Instead, it has been a remarkable success. This is largely due to Uganda's tourism policy which is committed to attracting high-spending, low impact ecotourists.

This policy appears to have paid off. Gorilla treks average 80 per cent occupancy. Bwindi and Mgahinga – Uganda's section of the Virunga Range – together account for over a third of revenue produced by Uganda's National Parks.

Conservationists have little to complain about. Bwindi – with over 300 species of birds, eight types of primates and exotic sounding creatures like the Golden Cat – has been protected from environmentally damaging development. Buhoma, the park headquarters, is a well-maintained backwater, with a dirt road leading to the forest. Inside the park there are few signs of human presence and tourists struggle along overgrown paths made passable by machete wielding guides.

Trekkers are only allowed to stay with the gorillas for one hour and then they must stand well back. Children under 15 are forbidden to trek because of the risk of disease transmission.

The most innovative development, however, is community participation. When BINP was upgraded to a National Park in 1993, local people were suddenly denied access to the area. "Banning people from land-use causes resentment which needs to be addressed or they can cause problems in the park," explained Andy Brock-Doyle of the International Gorilla Conservation Project which was called in by the Ugandan government in 1991 to habituate the Bwindi gorillas.

In Bwindi and Mgahinga, conservation has largely been translated into cash for local people. Fifty local jobs have been created in the park. A few entrepreneurs have also set up businesses: budget accommodation in Buhoma is a community project, profits from which fund other small businesses.

The most direct payoff has come through UWA's policy of revenue sharing. Twelve per cent of park profits are given to community projects in the parishes around Bwindi. As one locally employed park guide put it: "I have a very good job. I'm earning money for myself and I'm helping people from the area benefit too."

Mgahinga and Bwindi are so far the only parks earning enough money for

Park guards with silverback mountain gorilla

revenue sharing to become reality. So far 19 of the 22 parishes around Bwindi have been given US$ 52,000 towards projects, which include a dispensary, school buildings and a ribbon of red road linking two villages.

Twice as many parishes will benefit when money comes in from Bwindi Impenetrable National Park and Mgahinga Gorilla National Park Conservation Trust, launched in June to administer $4 million from the World Bank Global Environment Facility. Interest from the investment will go towards community projects, park management and research.

Gorilla tourism, however, is not problem free. Local people do not share foreigners' enchantment with gorillas, regarding them as crop-raiding vermin. Although Ugandans are given discounted permits, few take up the offer: last year just ten chose to trek. Conservation education has so far simply encouraged people to view nature in terms of monetary value.

As the area around Bwindi is perceived as rich, it may have the adverse effect of pulling in unsustainable numbers of migrant workers. Worse, there may be hostility if the promised cash is not delivered. There are signs that this may already be happening. Revenue for 1996 has not been dispersed because UWA is short of cash following rebel activity in western Uganda which caused tourist numbers to drop country-wide.

The most damming criticism, however, comes from primatologists, some of whom think gorilla tourism endangers the creatures it is claiming to protect.

Dr Tom Butinski, a senior conservation biologist specializing in African primates, believes that lack of research on the impact of tourism on gorillas means they are being put at an unjustifiable risk. "There has been almost no research in Bwindi. Gorillas are susceptible to new diseases. Yet thousands of people arrive in Uganda, and the next day they are next to gorillas," he said.

Financial pressures may also wear down conservationists' good intentions. Following the break-up of one of Bwindi's two habituated groups, UWA decided to habituate two more. The same insidious process in Rwanda led to 70 per cent of the gorillas being habituated.

UWA are under pressure from tour operators and government to habituate even more gorillas. At the same time, some tourists complain that the gorillas are too docile. They don't want, as Dr Edroma puts it, "gorillas lining up for photographs."

Dr Butinski argues the gorillas would be best protected by funding conservation from donor money. He suggests that tourists who want to see gorillas, visit the large lowland populations in DR Congo – a proposal unlikely to be met with enthusiasm by Rwanda or Uganda.

UWA are sympathetic to these fears. They admit there has been inadequate research and are planning to promote other tourism activities in Bwindi to reduce pressure on the gorillas. They are also considering Dr Butinski's proposal to reduce the risk of disease transmission by persuading tourists to wear face masks.

But UWA's sympathy can only stretch so far: their mandate is to protect all Uganda's wildlife and the gorillas are the only sector providing them with the revenue to fulfil that goal.

Visitors to Bwindi's densely forested hills should be forgiven if they fail to notice these rumbles of discontent. The region is lush and green. The cry of chimpanzees cuts through the early morning mist, and tourists return exhausted, but rhapsodic, from their encounter with the apes.

Even Dr Butinski concedes that if it has to be done, gorilla tourism in Bwindi is probably carried out as well as possible. ■

Anna Borzello is a freelance journalist based in Uganda.

Basata is a place of beauty and peace in the midst of Egypt's burgeoning concrete 'Riviera' on the Sinai coast. **Heba Aziz** and **Sue Wheat** report on one man's ecotourist dream come true.

Lessons from

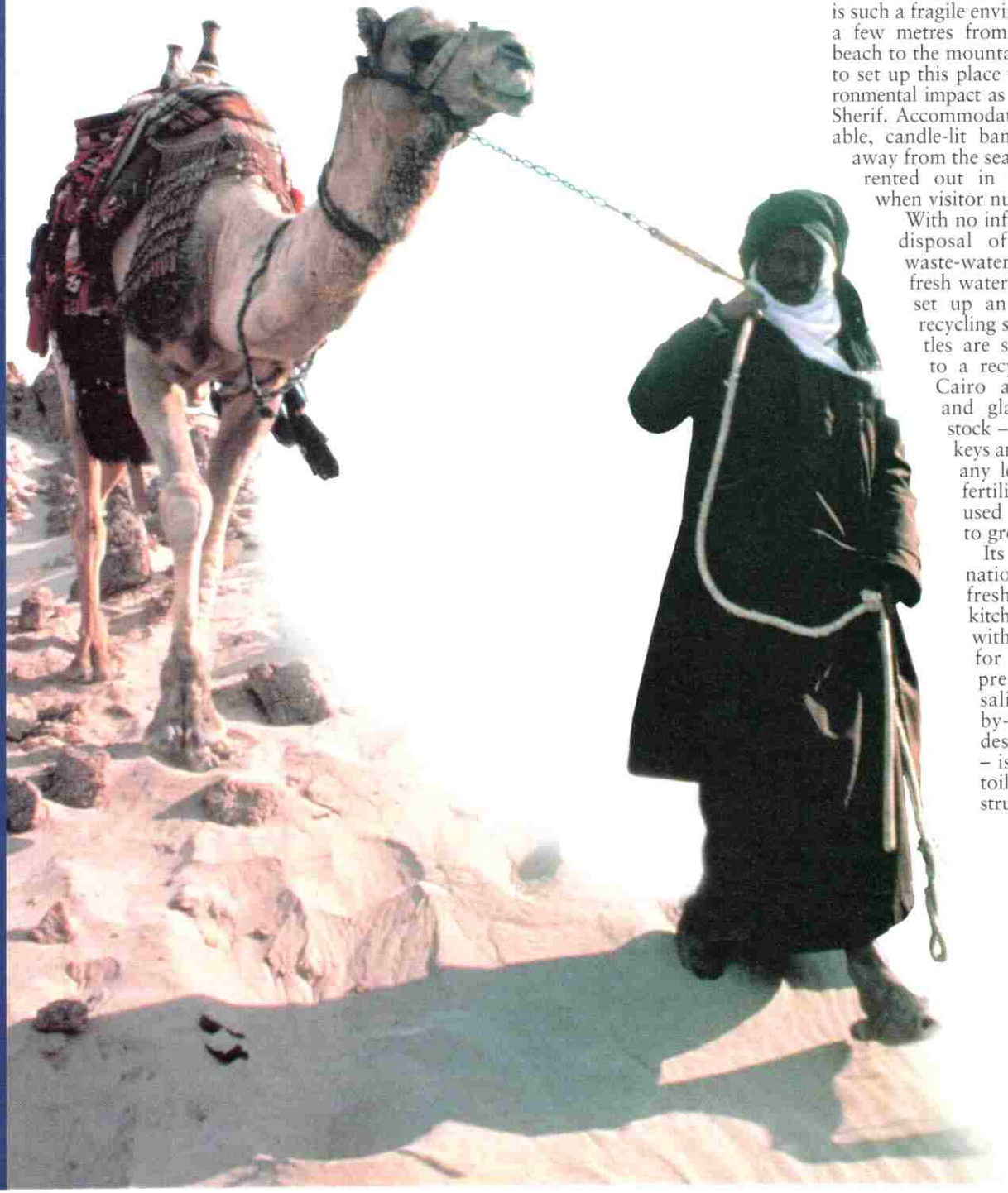
You hardly notice Basata from the road. Thirty miles before Taba, on the Egypt-Israeli border, you pass Nuweiba – a small town nudging into the backpacker scene – shops selling tie-dye T-shirts and ethnic trousers and Bedouin tents made into restaurants. Six miles north is Basata, an unsullied bay scattered with well-made bamboo bungalows and striking Egyptian-style mud houses.

The first thing you reach at the end of Basata's cacti-lined drive is the large bamboo reception, lounge and kitchen, decorated simply with low tables, cushions and Egyptian artefacts. A look around at the enviously content visitors proves this is by no means a backpacker's hippie haven, nor a cultural-shows-on-the-hour type place. It is for anyone who likes to talk, eat good food, read, snorkel, sunbathe and generally chill-out.

Basata (which is Arabic for 'simplicity') is beautiful and intends to stay that way. Set up by an Egyptian engineer Sherif El-Ghamrawy 11 years ago, Basata is run with Egypt's arid, fragile landscape in mind, conserving water and reducing waste to a minimum – an environmental management process that was so unusual that it took him 12 years to get permission from the authorities to operate. "This is such a fragile environment – it's only a few metres from the coral to the beach to the mountains so I have tried to set up this place with as little environmental impact as possible," explains Sherif. Accommodation is in comfortable, candle-lit bamboo huts metres away from the sea and tents are also rented out in the high season, when visitor numbers reach 300.

With no infrastructure for the disposal of solid waste or waste-water disposal, and no fresh water supply, Sherif has set up an all-encompassing recycling system. Plastic bottles are shredded and sold to a recycling business in Cairo along with paper and glass. Basata's livestock – goats, ducks, donkeys and a camel – recycle any left over food into fertiliser which is then used in the greenhouse to grow vegetables.

Its own small desalination plant provides fresh water to the kitchen and bathrooms with each tap running for six seconds per press and the high saline solution – a by-product of the desalination process – is used for flushing toilets and for construction. Sherif's love



Jeffrey Rotman/Still Pictures

Basata

of the area and commonsense approach to conserving it, is the driving force behind Basata's success.

But he realizes Basata stands alone amongst a host of luxury hotels planned along the Gulf of Aqaba. "Already most of Sinai is ruined – there isn't one metre of coastline that isn't sold to developers between Nuweiba and Taba. In a few years you won't see the sea, it's terrifying."

The construction that Sherif is terrified by is what the Egyptian tourist authority term the proposed 'Egyptian Riviera'. Egypt is promoting Sinai heavily to counteract the recent troubles that faced the tourism industry in Upper Egypt. The experience of the few tourist spots already developed is not encouraging however. Sharm El-Sheikh – currently the only large resort in Sinai – is a prime spot from which to take diving excursions to superb reefs like Ras Mohammed, and week-long camel safaris to St. Catherine's monastery. It is an artificially developed tourist town with tacky souvenir shops, luxury tourist 'ghettos' and Las Vegas-style casinos (which are illegal for Egyptians to visit).

Martin Wright/Still Pictures

Most hotels in Sharm el-Sheikh have lawns and flowering gardens although such greenery in the desert requires huge amounts of valuable water and polluting fertilisers. Across the road, local people have to live with very scarce water supplies, as the water that feeds the hotels comes from their private desalination plants and is not extended to serving the locality. With rabid hotel construction, Sharm el-Sheikh is on course to increase the number of beds from its current 8,400 to the 1998 target of 30,000, although the construction dust is taking its toll on the beach-side coral which is becoming dull and lifeless. When we asked one local hotel owner what the authorities were planning for the area, he answered immediately, "they are trying very hard to kill Sinai."

A Tourism Development Plan for the Sinai does include some environmental rules and regulations to be followed during and after construction, but implementation details or guidelines on how the rules would be enforced are glaringly absent. At Taba, this lack of enforcement is striking. Here, in stark contrast to the intricate waste disposal system of Basata a few miles down the road, the conventional waste management system of one of the world's most well-known luxury hotels is evident – it is dumped at the foot of the mountains and left for the Bedouin's goats to graze or choke on. Some of these hotels do have waste disposal technology, but have chosen not to use it, as the manager of the Salah ed-Din Hotel in Taba, pointed out: "it is fairly costly for us to employ someone to work on the shredding machine and in other recycling jobs, it is cheaper to dump the rubbish in the valley across the road where local people make use of it."

For the developers, the tourists and the Egyptian authorities, Sinai is a no-man's land, ready to be 'developed', despite the fact that there are currently around 15,000 Bedouin living along the coastal area set to be developed for tourism. Although their ancestors have lived a nomadic existence in the Sinai since the time of Mohammed, the tourism plans do not mention them at all.

That one of the main benefits of tourism to the local Bedouin community is that they can graze their goats and sheep on the rubbish dump is indicative of the relationship between the Bedouin and the current tourism strategy. Already, the livestock that the Bedouin depend on for their subsistence livelihoods are dying from diseases spread by flies attracted to the rubbish.

Bedouin women are unable to walk around freely now that they are obliged to stay out of sight of male Egyptian migrant workers and tourists. The women have also found themselves forced to search the rubbish for scraps of metal and cardboard to build houses in an attempt to gain legal and rights and fight off land-grabbing by foreign investors.

The authorities maintain that Environmental Impact Assessments have been carried out in all these areas, which begs the question – who is doing them and what are they worth? At the moment, the future for Sinai looks dim, and Basata shines out as a clean drop in a very polluted ocean.

Sherif believes that even large resorts could implement the environmental techniques that are followed in Basata.

"I think Egypt should be strong enough to choose the type of tourist we want. If I had built a disco I would have attracted party-goers. But if I build an ecological place, I attract environmentally conscious people.

Even if the number of tourists that would want to visit environmentally-run tourism projects equals one per cent of the world's tourists, Egypt couldn't cater to the demand. Sinai needs a focus so why don't we try and corner that market?" ■

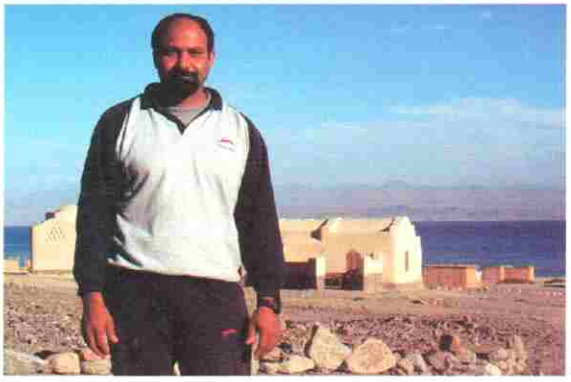
Heba Aziz is studying for a doctorate in the effects of tourism on the Bedouin in Egypt. Sue Wheat is an environmental journalist based in London.

Sherif El-Ghamrawy can be contacted at Basata, Nuweiba-Taba Rd. Tel/Fax: 0020 62 500481.

Main picture: Bedouin with camel, Sinai

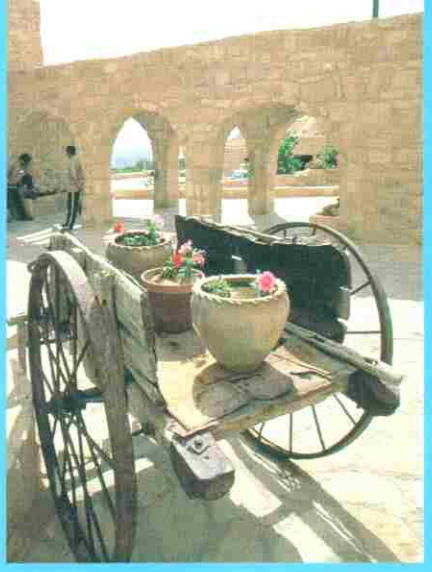
Left: Luxury hotels put increasing pressure on local resources

Below: Sherif El-Ghamrawy



Sue Wheat

Recycling a Jordan village



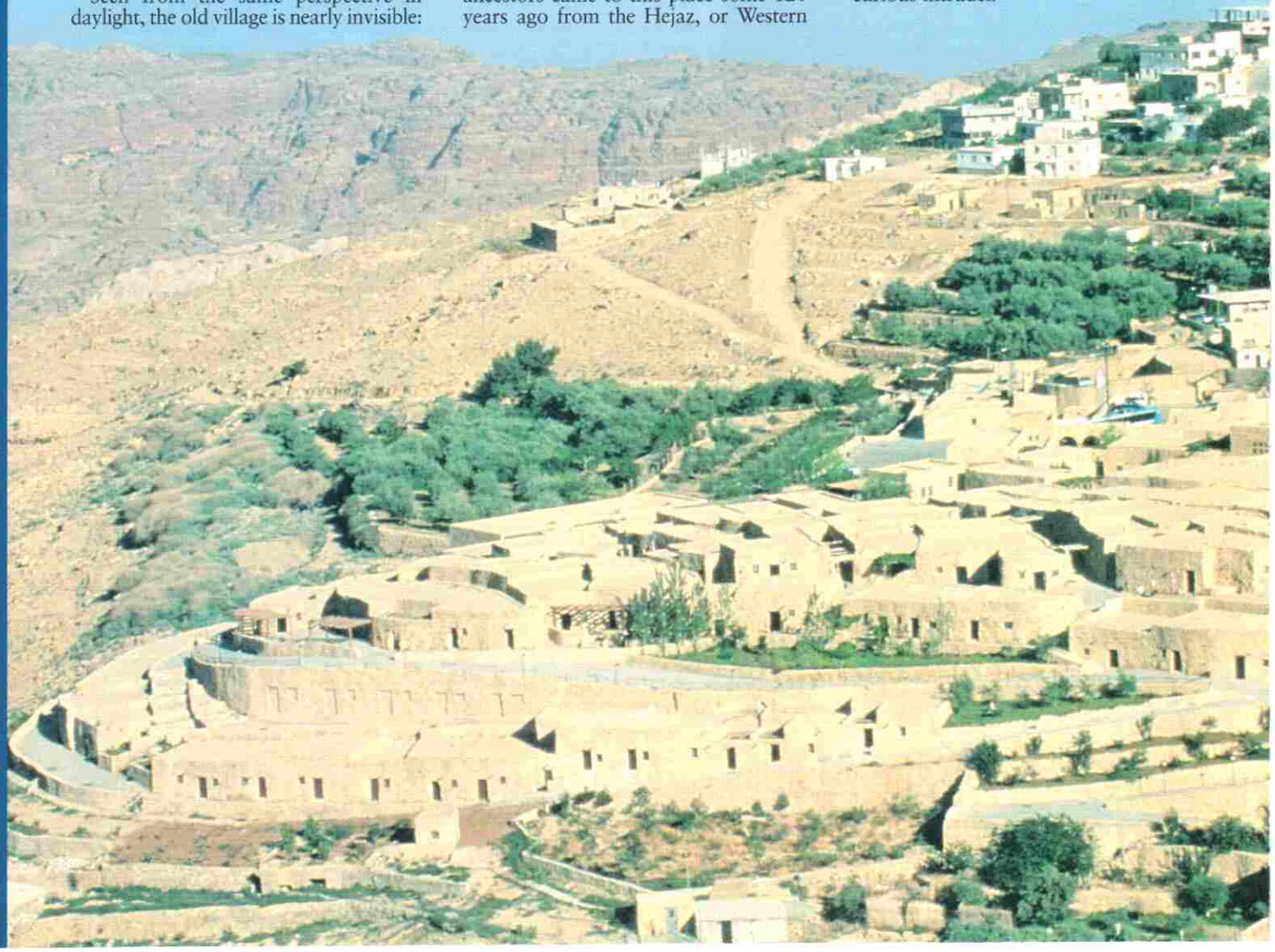
"Some people recycle paper and bottles. In Jordan they have managed to recycle a whole village." So said the British environmental campaigner, David Bellamy, announcing earlier this year that Taybet Zaman near Petra in Southern Jordan had won the British Airways global award for achievements in cultural heritage and environmental preservation. **John Rowley** went to investigate. **Mark Edwards** took the pictures.

Winding down the Taybet Mountains from the Desert Highway at night, the village of Taybeh appears like a swarm of fireflies in the darkness. All around the crescent of hills are the lights from recently built concrete houses; below them on a circular promontory are the more concentrated pinpricks of light from Taybet Zaman, or old Taybeh, now restored as a five star tourist resort.

Seen from the same perspective in daylight, the old village is nearly invisible: just a scattering of small flat-roofed single-storey sandstone dwellings, like a walled medieval settlement, almost lost in the lap of the encircling hills, a natural part of the stony brown landscape.

One man with a special interest in the transformation of the old village into a tourist hideaway is the 52-year-old former Mayor of Taybeh, Abu Firas. Grey haired, chain smoking and the father of six boys and two girls, his Nabatean ancestors came to this place some 120 years ago from the Hejaz, or Western Arabia. They were, he explains, nomadic farmers who, like most dwellers in this harsh land, collected sandstone blocks and rubble to build winter shelters for their goats, donkeys and sheep and for themselves. In spring and summer, all would journey with their tents into the upland pastures for better grazing.

By mid-century, the family owned a number of adjoining stone dwellings, each with a space for animals, and a second room for family members to sleep. The rooms were small, their size dictated by the lengths of juniper wood which held up the flat roofs. The walls were up to two feet thick. There was a door, but few if any windows, and these, very small. The houses were built to be secure in summer from any curious intruder.



By then some families had built a new system of courtyard dwellings, providing more permanent and roomy shelter. And at the centre of the circular jumble of streets and houses was a garden of olive trees. All around, under a Mediterranean blue sky were the fields and hills, with ancient tracks, eroded soils, and stunted trees – and in the distance the sacred mountains of Petra.

It was a lovely place, but crowded and unhygienic, without sanitation or running water. Infant and maternal mortality was high. The nearest town with a school, health centre and shops was 20 miles away at Ma'an, accessible only by horse or donkey. Families lived on a diet of yoghurt and butter, houmous (chick peas), figs, tomatoes, bread and occasionally meat.

Then, in the 1950s, came the metalled road, higher up the hillside. Families had grown bigger and the pressure to move into more modern houses, with more space, better access and modern conveniences saw the beginning of a move out of the old village. By 1960, it was almost deserted as a living community and completely abandoned by 1980, except for three or four families who rented space there.

There was much debate about what to do with the old village. The local council suggested knocking it down and replacing it with a cemetery. Abu Firas had another idea. Inspired by his experience with the Queen Alia Foundation which worked on income generating projects for Bedouin and local women, and by rumours of negotiations for developing another similar site in nearby Wadi Mousa between the old Nawafleh village owners and a local tourism investor, looked for a suitable partner.

His further investigation led him to Jordan Tourism Investments (JTI), a Jordanian company which had recently renovated part of the Abujaber family estate in Yadoudah outside Amman and turned it into a series of restaurants and craft shops which was, and is, a highly successful enterprise. Kan Zaman, as it is called, is another late 19th century solid stone settlement with great Romanesque arches, cool

Main picture: Taybeh village spreads over the hillside above the old settlement of Taybet Zaman

Left: A recycled courtyard, Taybet Zaman

and fragrant with flowers and spices – and famous for its local food dishes.

"We had gained a lot of insight into how to do this sort of conservation, and we were motivated at Kan Zaman by the fact that the place was a part of the family history – and that my father placed great sentimental value on it" says Yazid Abujaber, Managing Director of JTI. "As we worked, our ideas became more creative. We found that we had a lot of plans which we could not put into effect at Kan Zaman, and which have now gone into Taybet Zaman.

"One of the key principles behind the new project was to make a partnership with the local community. Only that way could we expect their support over the long term."

After a good deal of talking, agreement was reached for the many owners of the property – some of them children, and some owning just a fraction of a building – to retain their ownership and to rent the land and buildings to the operating company on an escalating lease renewable every five years, according to the level of inflation.

The investors were to give priority to hiring the local people of Taybeh for the construction work and to pay six per cent of the net operating profit to the owners. Eventually, 360 rent contracts were signed involving more than 150 land owners, including one with the village council which has 18 per cent of the rent shares. Around 200 local people were involved in the construction work.

To make sure that local people would also benefit over the long term, and that they had the necessary skills to work in an international hotel, the company opened a vocational training centre in Amman for young people from the community. As a result, 125 of the 171 employees come from Taybeh village and all but a handful are from the surrounding area. They include 35 administrative staff and every sort of job, from public relations officer to guards and labourers.

A couple of owners were not willing to rent their property, but were eventually persuaded to do so. So how do the villagers feel about things now?

"Some people are very happy to see grandfathers' house restored – to have kept their roots together" says Yazid Abujaber. "Many houses had no roofs and would have been lost completely. Some may say they are not happy that we took over the property, but I think they are bluffing. They see their property restored, they have a good job and a permanent home. I really believe that so far the social impact has been wonderful. It has certainly done more good than anything else. If it had not been for the project, many local people would have had to find work outside, in the army or in the police, or other work in Amman or in Aqaba. They would have lost their cultural roots."

There is no doubt that partly as a result of Taybet Zaman, Taybeh village as a whole has had a new lease of life. There has been a fourfold growth in building activity, land prices have gone up fivefold since the early 1990s when the work began, and the village can now boast a restaurant, a new boutique, a supermarket and a bank, as well as a new three-storey mosque for which the locals raised 300,000 Jordanian Dinars (or some $450,000). The single schoolroom in a village house belonging to Abu Firas' parents. has now been replaced by six schools. The population has gone up from 3,792 in 1991 to 4,279 reversing the usual trend of out migration from remote rural villages such as this.

Abu Firas himself has no doubts. "I am proud to see people using my old house" he says, "very proud." He does not see that old traditions are being challenged by mixing with visitors from all over the world. "We are an Islamic community, and we have a tradition of hospitality." What's more, the aspirations of the young people are changing. Only 40 per cent of the village is now involved in farming. His own eldest son is training to be a lawyer, another is on a vocational course to do engineering maintenance at the hotel, a third is taking the local GCSE exam.

Yasine Sadiat expresses the view of a young employee. One of 12 children, and now aged 23, he has risen through the hotel ranks to become Assistant Head Waiter. "A lot of my friends work here" he says. "We see it as a good opportunity to learn languages and to meet people.

"We still have sheep, chickens, goats and a donkey at home, but my father has a shop and someone else keeps an eye on the animals. My ambition? To improve my English and to climb higher up the hotel ladder."

Another group of employees have formed themselves into a social committee to provide voluntary entertainment to the guests in the Bustan, or village square, where once Abu Firas' father's olive trees grew. (Today there are fig trees and roses in the square, as well as a herb garden and olives). The young waiters dress in black trousers and belted tunics, with Bedouin headresses and perform the traditional village dances – the Dabkah, Samar, Jofieh and Dahieh – to the music of the ou'd (lute), flute and tablah.

Their leader, Mahmoud Rawdieh, who works in the kitchens says he has no difficulty in recruiting performers and no shortage of engagements outside the hotel, at local weddings and festivals, as well as at the hotel.

Credit for creating a holiday village, with every modern amenity, that still catches the simple beauty of an earlier world, must go to the team who planned, designed, built and now manage Taybet Zaman. A key member of that team is the chief architect, Leen Fakhoury, who has put her university teaching job in vernacular architecture to amazing effect. "We did not want to compromise on the authenticity of the village," she says. "We wanted people to have an experience of the real village environment, to retain the pattern of the buildings and of the internal space, with the thick walls and local stone for tiling and stone pathways. We wanted to project pockets of green, but to keep the harshness of the regional style."

Inevitably, there is something false in this fantasy world of the shopping souk, the Turkish bath and the photographic gallery where guests can dress

up in Arab gear for their holiday snaps. But the craft skills are real, and the food is local. The water is processed and re-used to grow the tomatoes and cucumbers, and to water the new olive groves on the old terraces. Even the olive oil soap is locally made, and wrapped in recycled paper. And with only 105 rooms in 10 acres, there is space enough to quietly enjoy the old stones and the dry desert air.

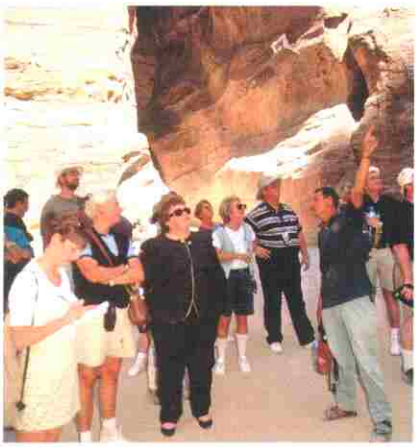
Walking through the Bustan, down through the sandstone paths and the low honey-coloured walls to the swimming pool in the early morning, in this ancient landscape and with the last of the cocks still crowing in the morning sunshine, it is difficult to find fault with this attempt at high class conservation.

Leen Fakhoury, in a paper for UNESCO[1], sums up the argument like this: "A few intellectuals may consider the re-use of the almost discarded part of the old village as an invasion and severe transformation of the traditional essence of the village," she writes. " But many others appreciate it, as an opportunity to bring back a new use for a deteriorated fabric and an opportunity for a sustainable tourist development, advocating the cultural heritage and the natural resources of the village."

But perhaps the last word should go to the Director of Archaeology at the next site being developed by JTI, the owning company of the deserted village of Nawafleh, just outside Petra, expected to open early 1999. There Dr Khairieh 'Amr has found evidence of continuous habitation dating back to the Nabateans who built the ancient city of Petra 2,000 years ago. She has also dug up a Nabatean stone olive press, proving for the first time – and contrary to the writings of the Greek geographer, Strabo – that the Nabateans did cultivate olives. Now the press will form part of the museum that will feature in the new village, as at Taybet Zaman.

"Wadi Moussa (the Valley of Moses) used to be such a pleasant little place," she says. "Now, with the tourist boom so much of the valley has been turned into hotels and concrete. It is a real pity. Environmentally it is much more sound, to me, to use the existing buildings rather than to build new ones – especially when the new ones are usually so horrible." ■

1. *Culture, Tourism & Development, The Case of Jordan*, 1995, the World Decade for Cultural Development, UNESCO.



Top left: Incense for sale in the village souk
Left: Architect Leen Fakhoury
Above left: Working at a potters wheel
Top: Tourists visiting Petra
Above: Waiters dress in costume and perform traditional village dances

Exploring Gha

Forest conservation is an important part of a major ecotourism programme being developed by the Washington-based Conservation International. Here, **Mari Omland**, Manager of the Ghana programme, reports on a newly constructed rainforest canopy walkway in Kakum National Park.

Raindrops roused me from a sound sleep 12 stories up in a Kyen-kyen tree. As I folded my sleeping bag, I peered into the glistening leaves, hoping to glimpse a Campbell's monkey from my well-placed lookout. The monkeys remained hidden in the dense greenery, but my night on the tree-top platform had given me the chance to enjoy a West African wood owl's silhouette and a tree hyrax's haunting call.

I was among the first to spend the night on the newly constructed rainforest canopy walkway in Ghana's Kakum National Park. It was my responsibility to test the ecotourism products we were developing for the park. I made my way across the suspension bridges which, although quite level, returned me to the forest floor where a steep slope rises to connect the walkway to the ground. I marvelled at how easy it was to explore the tree-tops along this unusual path.

The walkway's six bridges total 330 metres in length, and the system of ropes, cables, safety netting and platforms are carefully designed not to injure the supporting trees. Creativity was key in the walkway's construction, with the crew facing design adjustments daily to accommodate unexpected circumstances, such as squirrels' nests or crooked branches. Safety was paramount in planning, but the end product also had to provide plenty of adventure as well as comfort.

Kakum's rainforest canopy walkway, the first of its kind in West Africa, is the centrepiece of an integrated conservation strategy to protect the biological diversity of Kakum. An isolated fragment of what was once a continuous belt of rainforest extending from Sierra Leone to Ghana, Kakum remains an island habitat for several globally endangered species, including forest elephant, bongo and white-breasted guinea fowl. It also contains the headwaters of four major rivers that supply water for more than 300,000 people.

The project provides a vivid example of lessons learned in developing ecotourism within a forest ecosystem that is under pressure from overuse by local people. The challenges were many, ranging from basic infrastructure design to fulfilling local communities' expectations. Conservation International's goal was to demonstrate that tourism can provide the basis for economic growth locally and nationally, as well as the opportunity to educate visitors about other benefits of conservation.

Ghana's President, J.J. Rawlings, recognized this potential, and officially opened Kakum in March 1994. This event boosted visitor numbers to more than 7,000, up from just 700 in 1992. But the significant jump to 27,000 visitors per year came after the canopy walkway was built in 1995.

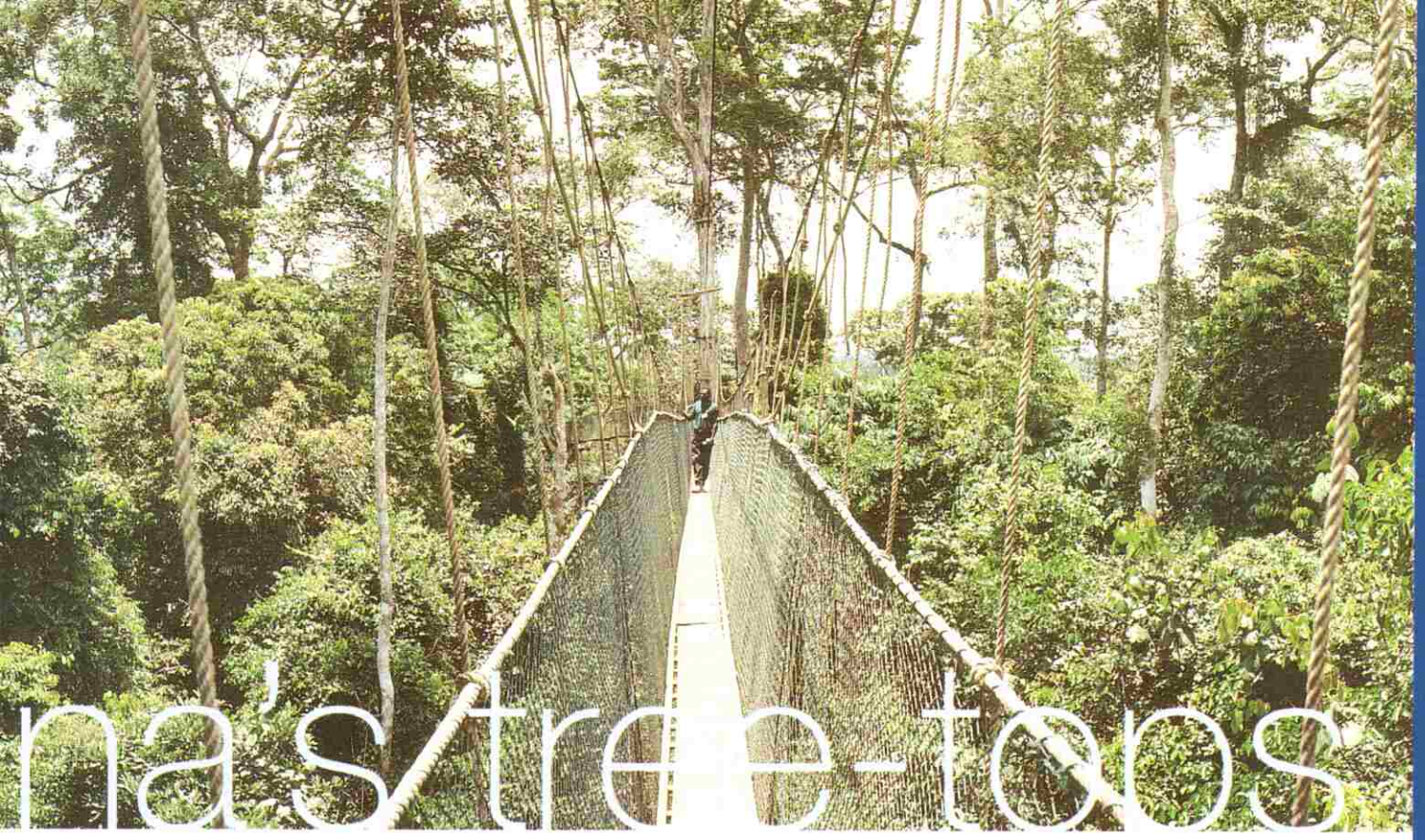
The walkway completion was followed two years later with the debut of the park's 'Hidden Connections' exhibit, officially opened on Earth Day 1997 by Ghana's Wildlife Department and Conservation International. The permanent exhibit is part of a four-building visitor centre that also includes a restaurant, a gift shop and rest rooms. The facility can accommodate up to 75,000 visitors annually.

Early decisions

During the earliest stages of our work, we met with a critical design decision that reflected the unique characteristics of Kakum's forest. When the team first scaled the trees at the selected site, they had full view of a farm just outside the park – a reminder that the forest is a small island of trees. The site still proved to be the right choice, however. In addition to its spectacular trees, it was the most accessible entrance point, key in achieving the park's mission to attract visitors and generate local income.

While ecotourism at this main gateway near the village of Abrafo is thriving, the next step is to further distribute economic returns to other communities that border the park. The success at Abrafo means even the hardest to reach hamlets have high expectations. This adds to the challenges for Kojo Mbir, Conservation International's Program Advisor, who works with the Ghanaian Wildlife Department to involve local communities in the park's visitor-use planning process.

"At first residents were resentful because the park denied them access to forest resources, such as bushmeat and building materials. But the situation has turned around since we began helping local people establish projects they requested, such as snail cultivation and honey production. These projects provide replacements for some of the mate-



na's tree-tops

© LambStudio

rials people have traditionally taken from the forest, and they also provide a new source of income," Mbir recalled.

"By making certain that communication remains open with local people we encounter enthusiasm in almost every village. The villagers enjoy identifying interesting attractions in their area. In Kruwa, they insisted we trek into the forest to see the pools where elephants wallow. In Aboabo, they took us to see the place where the mythical forest spirits grind their medicine," he continued.

"As the local people recognize the potential to earn money from the park, we see more and more support for protection. Villagers who at one time harassed or ignored park personnel are now stopping park vehicles and filling them with plantains and yams for staff to bring home to their families."

Marketing Kakum

"Don't you have a moon in your country?" a small girl questioned at me. She was puzzled as I stared in wonder at the night sky. After all, the moon wasn't even full. With no electricity, Abrafo was engulfed by darkness, emphasizing the moon's brilliant glow and magnifying the multitude of forest sounds. I smiled in response and returned to my conversation with Ben Asamoah-Boateng, Kakum's manager with Ghana's Wildlife Department.

The natural and cultural resources in and around Kakum National Park are compelling: trees reach magnificent heights of 60 metres. Colourful local art and a vibrant culture reflect respect for nature in traditional stories and artefacts. Yet these resources need to be showcased in a manner to attract tourists.

Kakum was part of a larger plan to package and market the entire region, which also claims beautiful beaches, historic seaside forts and castles. These attractions are within 30 kilometres of Cape Coast and less than three hours from the international airport in Accra, the nation's capital. Known as the Tourism Development Scheme for the Central Region, or TODSCER, the initiative was launched by a Ghanaian regional development agency, with support from the United Nations Development Programme. The United States Agency for International Development has since committed five years of funding totalling $8 million. Conservation International, a private, non-profit organization that works to conserve global biodiversity, joined four other US-based organizations to provide technical assistance to the Ghanaian government and implement the project.

As part of our planning for the park, Ben Asamoah-Boateng and I developed a survey for local people about household uses of non-timber forest products, such as bushmeat, cane for baskets and medicinal plants. This helped us to create projects that would offer alternatives, as well as generate income.

We also prepared for a design meeting in partnership with the American Society of Landscape Architects. This brought together some of the world's top zoo and park design professionals with leading Ghanaian designers and wildlife and tourism professionals. The park, it was agreed, would be crucial not only to protect Kakum's resources but also for creating a Ghanaian model for a successful conservation area.

Local revenue

Early on, feedback from tourists often related their frustrations from not viewing animals in the dense forest. Due to a history of heavy hunting pressure, the forest animals are shy, and Kakum's forest elephants, six species of primates and great variety of antelope typically elude visitors.

The design workshop took into account the forest's unique character, and led to plans for the canopy walkway and early conceptual designs for the visitor centre. The walkway was the ideal first step, since it provides an unusual adventure. Other facilities are planned as visitor numbers grow.

Revenue generated by the canopy walkway contributes significantly to the Ghana Heritage Conservation Trust, established to maintain project-related infrastructure and financial sustainability. In addition, USAID has pledged a seed endowment of $2 million. In 1996, the walkway earned $43,000, and other local income is generated through park gate fees, gift shop sales and revenue through hotels and other associated economic growth. An estimated 2,000 local people have found employment related to the park.

Ben Asamoah-Boateng is optimistic about Kakum's future: "The forest has always been integral in the lives of the people in this region. But commercial agriculture and logging has destroyed most of the natural habitat, and has led to increased pressure on the forest. It is just a matter of giving them opportunities and tools to be a part of the solution. We are already seeing tremendous results." ■

Can computers save a rainforest?

In theory, all that is needed to save indigenous people, living in harmony with their rainforest home, is to get them involved in showing high-paying tourists around. It doesn't often happen in the way it is supposed to do, but once in a while it does, as **Randy Borman** reports.

Off in the north-eastern corner of Ecuador there is a tiny community of Cofan indigenous people who have developed a thriving ecotourism programme and have been using it as the base for both defending their forests and culture in the scary atmosphere of a world where forests and their cultures hardly get a second thought. So what went right?

Getting to the Cofan community of Zabalo is something of an adventure but it can be accomplished in a day if all goes well. Air travel gets you from Ecuador's capital city, Quito, to Agrio in less than an hour. A rickety bus or pick-up truck then proceeds to demonstrate the negative side of colonization, oil exploitation and forest destruction in general as it runs to the river port of Chiritza. From there, it's canoe or speed boat time. The visitor notices the river getting wilder and less populated, and by the time Zabalo is reached late in the afternoon primary forest is only occasionally broken by tiny homes, with small fields of plantain and manioc.

The village of Zabalo does not look much bigger as the boat docks, but travellers are immediately surrounded by a mob of laughing, curious children, chattering in the Cofan language. One of the older Cofan men will meet the tourists and show them to well laid out and comfortable leafed-roofed cabins built from beautiful local hardwoods. There is time for a quick shower in the separate bathrooms or a dip in the stream. Supper is a combination of local and imported foods, served in a lofty dining hall. Afterwards, the guide explains the itinerary. This will vary according to the weather but always during the time spent in the forest the guides, cooks, cabin crew, porters, motor boat drivers and companions will be the Cofan people.

Visitors are introduced to the forest through the eyes of a people and a culture which has existed here for many centuries. A favourite demonstration by the guides is to ask the visitor to say "stop" somewhere during the walk. The guides will then proceed to identify and show the use of all the plants and animals in the immediate vicinity. The confusing mass of greenery suddenly takes on all the qualities of a combined supermarket, pharmacy and hardware store.

The chances of spotting wildlife are excellent. A tropical rainforest is not the Serengeti, yet with forest people as guides it is amazing how many animals can be found. Because the area is protected by the community from any form of exploitation the animal populations, including large mammals such as jaguars and tapirs are intact. It is an incredible experience to see a tapir bathing in a jungle stream at dawn, or come upon the tracks of a jaguar that was following you curiously only minutes earlier.

Sometime during their stay, visitors will be introduced to Zabalo's various conservation projects. Funded largely by interested visitors and the community itself, Zabalo's turtle project has already re-introduced over 4,000 endangered river turtles to the river. Other projects include fish farming, medicinal plant growing, monitoring of hunting and fishing, and a pond full of caimans – all part of a strong commitment to preserving the forest and keeping it healthy.

This utopian situation has been hard-won. The community spent over eight years gaining legal recognition. Incursions by lumber men, colonists and neighbouring indigenous groups are a constant source of concern. In 1991, oil company invasions into Cofan territory sparked a three-year long battle, pitting a tiny indigenous community against government-owned oil interests. After a series of actions at local and government levels, the oil company was forced to abandon its plans: a landmark victory in a world where big business usually takes precedence over conservation. Even today, the war is far from over.

Looking at this success story two things become apparent. The first is that this did not happen overnight with some conservation entity sinking huge amounts of money in an 'ecotourism project'. Members of the community became involved in what is now known and ecotourism as early as 1978. The slow evolution of skills, infrastructure and administrative ability has coincided with an increasing awareness of the value of the intact environment. As hunters and gatherers, it took people a while to get used to watching monkeys instead of eating them. But over the years, conservation values evolved. The fact that Zabalo has never received any form of support from outside has been frustrating at times, but community members feel a tremendous pride in their achievements both at the business and conservation levels.

The second ingredient is that Zabalo already had the basic knowledge of its Cofan cultural heritage of interaction with the environment. The fact that the community was able to use that heritage to enter the world economy at a competitive level has been of primary importance in maintaining its cultural values.

Drawbacks are few when compared to the alternatives available. The cultural changes implicit in showing groups of outsiders your environment seem unimportant when compared to the demands of any other available economic model. However, to continue relying on ecotourism as a community's principal source of income Zabalo is faced with difficult problems of legalization as a travel agency to comply with Ecuadorian law, marketing trips to outside agencies, and establishing a reliable communication system. At the moment, all this means is that people have to leave their forest and culture and learn to live in the very foreign outside world.

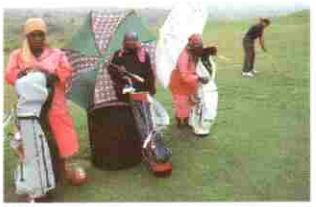
A possible solution is the increasing availability of satellite communications combined with electronic mail and computer systems. The irony of trying to maintain our cultural heritage and its forests with 21st century technology is certainly not wasted on us. Yet ultimately, we are people of our times, and if we are able to harness the best of the outside world to defend the best of our heritage we feel we are heading the right direction. ■

Randy Borman has devoted himself to conservation and ecotourism among the Cofan people.

Stephen Corry/Survival

Opinion:

Stemming the tourist tide



Eric Miller/Panos Pictures

As one of the world's largest economic activities, second only to trade in armaments and perhaps oil, the debate on tourism's future growth and sustainability is fierce. Here **Paul Gonsalves**, Acting Director of the Ecumenical Coalition on Third World Tourism, expresses his view.

That tourism impacts society and the earth is common sense: the question is, can the benefits outweigh the costs? Arguments about development (not just tourism) often state that nothing comes without a price. However, are we selling our souls for a mess of pottage? Do ends always justify means?

The impact of tourism in Southern countries is different from that in the developed world: differences in economic levels, cultural patterns, legal systems, and public awareness being some. Many poorer countries see tourism as the only way to earn valuable foreign exchange to import consumer products and industrial technologies, often ignoring social and ecological considerations.

Nevertheless, given that a major part of the investments in and profits from tourism take place in the North, the role of multinational corporations cannot be ignored. Contrary to what the proponents of the industry would have us believe, the jury is no longer out. The facts have been presented and examined, the arguments heard, the verdict returned: Guilty, as charged.

Let's examine some of the evidence, starting with societies and culture.

Tourists and tourism are symbols of *modern* Western values, which are seen as better, and have a *demonstration effect*. These include the disintegration of traditional value systems and the breakdown of family and social structures. Personal achievement is seen as more important than personal relationships. Agriculture, fishing and animal husbandry are seen as lower status than service sector work, and movement away from these brings about a dependency on import of basic goods.

The relative wealth of the tourists also leads to increases in personal crimes, the prostitution of women and children, the narcotics trade and indeed drug addiction. The large number of outsiders (tourists and migrant workers) results in a loss of identity and in distrust, suspicion and conflict between *Us* and *Them*, alienation and anomie. Traditional social sanctions and controls cease to operate.

In short, culture and society are on sale for profit without concern about its long-term impacts. Money becomes the key to a good life, to hell with faith, hope and charity.

Let's go on to nature and ecology. Today, the tourist industry maintains that 'tourism is essential to conservation', its promotion all-important, its growth unquestionable. The World Travel and Tourism Council, for example, exists to 'eliminate barriers to growth of the industry'.

This ignores the reality that people and nature have lived in harmony for centuries, based on principles of nurturing and compassion. These fundamental ethics have been subsumed, ever since the industrial era began, by a relationship between man and nature rooted in the rhetoric of consumption, resource management and profit. It ignores the fact that the future of humanity and the earth are intimately bound up: one cannot survive without the other.

Although the tourism industry wears an eco-friendly face, and pays lip-service to environmental concerns and good practice, it has on the contrary served the cause of environmental destruction, particularly in the developing world.

In Hawaii, traditional burial grounds have been razed to make way for new resorts. In Bali, devout Hindus are horrified that their temples are overshadowed by monstrous, ugly marinas and condominium-style hotels. In Goa, farmers and fisherfolk have been forced off their lands, forced to seek new livelihoods which they are ill-equipped to handle.

In Costa Rica and Belize, coral reefs have been blasted to allow for carefree, unfettered watersports. In Phuket, Thailand, the yacht club has constructed over a public road, effectively denying local people access to their homes beyond.

The world over, golf courses – all the rage today – take land away from local communities, consume enormous amounts of scarce freshwater, leaving in their wake hazardous chemical effluents. It is estimated that the water needed to water a single new golf-course can supply a village of 5,000.

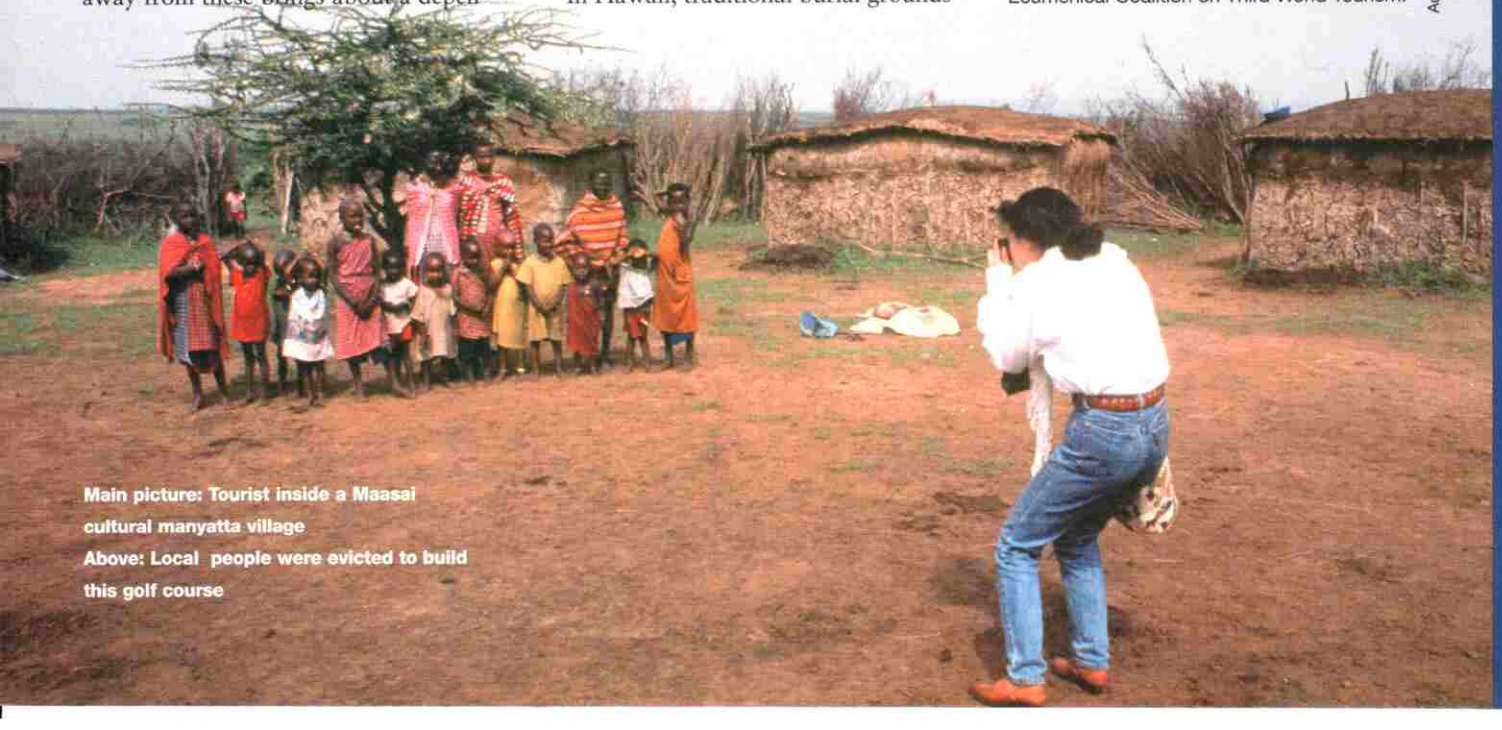
The bottom line here is that tourism brings with it a form of urbanization, in conflict with nature and the human habitat. It is not just destination areas (or host communities) which are affected by the untrammelled growth of the industry. Concerns about the destruction of the ozone layer, for example, cannot be separated from the inexorable demand for long-haul aircraft which pollute the skies in ways which are not even beginning to be understood.

Environment is not just about trees and animals, it is about the liveability of the human habitat. We need look no further than London's West End in the summer months to see the truth.

It all boils down to a question of numbers. Good practice is not good enough. There must be, as the Club of Rome said, limits to growth. Regulate, rather than throw wide the floodgates. That is the key to the future. ■

Dr Paul Gonsalves is founder of the Indian NGO, Equations, (Equitable Tourism Options) and Asia Programme Co-ordinator of the Ecumenical Coalition on Third World Tourism.

Adrian Arbib/Still Pictures



Main picture: Tourist inside a Maasai cultural manyatta village
Above: Local people were evicted to build this golf course

Last word:

Tomorrow's travellers

A new form of ecotourism in which volunteers help in cultural and environmental conservation and research is gaining ground. **Mark Cherrington** reports.

It was in a sacred cave on a hillside in the hot centre of Australia that I heard the oldest secrets in the world. They were told to me by an ageing Aboriginal tribal leader just as he was told and as his ancestors had been told for some 40,000 years, elder to boy, father to son.

The knowledge that the Aboriginal man told me dealt with the creation of the world, the meaning of the stars, birth, life, and death. And there were worlds more of knowledge, layers of secrets in the man's eyes as he looked out over his strange red world. It was one of the most profound experiences of my life. I had to swear that I wouldn't tell anyone what I heard or saw, so unfortunately I can't tell you anything more specific about what he told me.

On the other hand, you can buy these secrets for US$5.

You see, this experience is part of an ecotourism operation being run by Herman and Mavis Malbunka. Below the cave they have a very tidy trailer park and tent sites with lovely, incongruous green grass and shade trees and neat little white-painted rocks. There are ranch buildings, showers, and a little food market. Aboriginal traditions are fast disappearing, and the Malbunkas hope through this effort to preserve them even as they generate income for their tribe.

On the surface, ecotourism like this seems a good thing. After all, tourist dollars can save habitats, animals, and cultures that would otherwise disappear. But those same dollars represent a fundamental problem with ecotourism: fragile cultures and habitats are just that – fragile. To bring in enough people to make the business work, one must risk undermining the very resource that attracts them. Self-regulation is the key, but when profit is the goal, there is little incentive to be conservative.

And then there is the basic ethical issue: the fact is that there is no excuse for me or anyone else to hear Herman Malbunka's secrets. How sacred will they be once they're packaged and sold by the dozen to tourists? How meaningful? On the other hand, without that income, what hope will Herman or his family have to preserve their traditions?

But what if the people who visited there didn't contribute money? What if they contributed themselves? That is the premise behind Earthwatch expeditions. These are scientific research projects led by prominent scientists to collect data on endangered species, threatened habitats, ancient civilizations, public health, changing climate, sustainable development, and, yes, cultural survival. Earthwatch invites members of the general public to join these scientists, to participate as full-fledged expedition members, and to share the costs of the research among them.

In this kind of participatory research, people do, indeed, visit remote cultures and learn ancient secrets (among other things), but they do so in the service of the culture, not in the interest of voyeurism. In fact, several Earthwatch projects in Australia have helped Aboriginal people to locate and document their prehistoric rock art and to preserve ancient rituals directly. They've protected fragile sites and made videotapes that can be shown to the younger members of tribes to help them appreciate and participate in their own traditions.

Of course, I have a vested interest in saying this; I work for Earthwatch. But I really believe that this model is the key to the future of tourism. I've seen too many new national parks and museums, too many children made healthy and communities made whole by this approach to be persuaded that mere money could ever be the answer.

That's not to say that ecotourism is inherently bad. Some of it can be very beneficial if it's done carefully, and several Earthwatch expeditions are geared to collect the data that can help make ecotours appropriate enterprises.

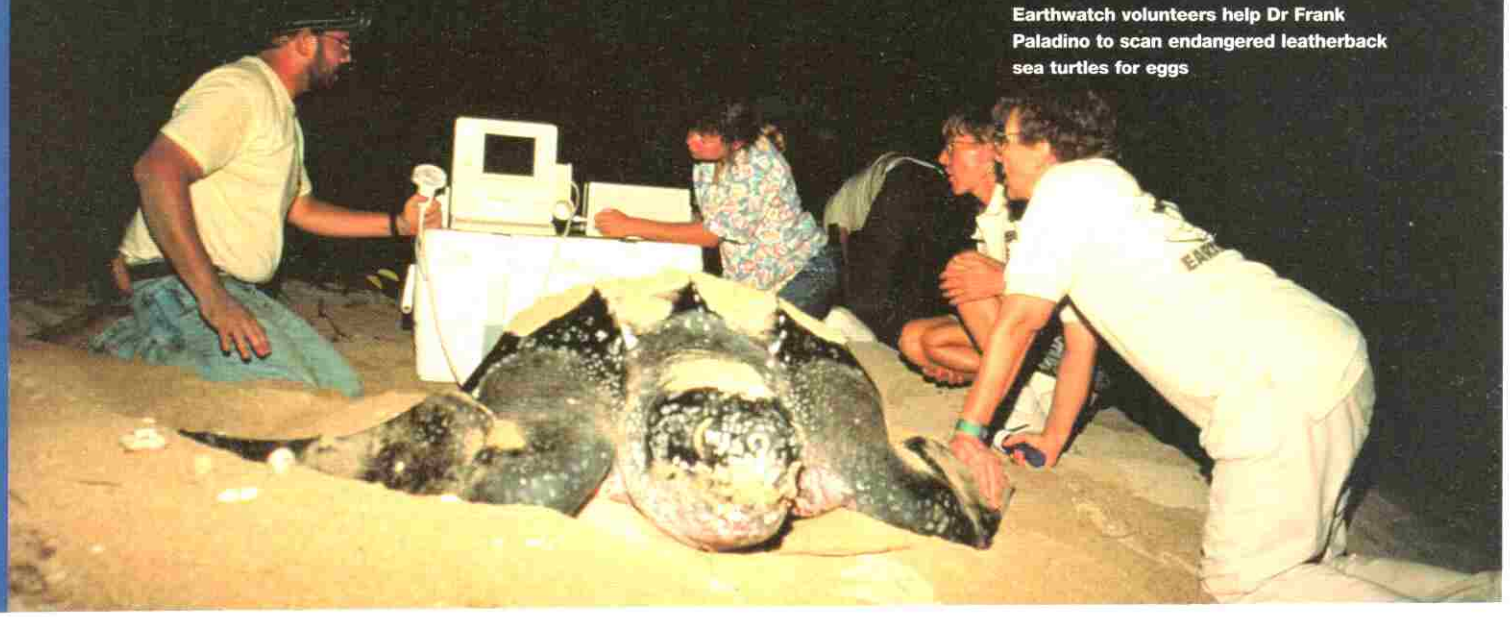
But for the volunteers in participatory research there is an element that really sets it apart from standard ecotourism. In this kind of travel people learn more than a lifetime of ecotours could teach them. They experience a place and a people with a depth of understanding that no visitor will ever know. But most importantly, they have the knowledge that they made a difference with their hands, not their wallets.

And there's this: even at its best, standard ecotourism is, in the end, simply rich people giving poor people charity, to give them an incentive to save a culture or a habitat – noble, but hardly desirable or sustainable in the long term.

Participatory research, on the other hand, involves people giving themselves – their time, their ideas, their labour - to find constructive ways to save a culture of a habitat in perpetuity.

I think that's what the future is made of. But don't take my word for it. Ask Herman Malbunka which of those options he would prefer.

Mark Cherrington is Editor of *Earthwatch* magazine in Boston, and a freelance writer, photographer and lecturer.
Earthwatch may be contacted at any of its offices worldwide:
United States (Tel: +1 800-776-0188), Oxford, England (Tel: +44 (0)1865-311-600), Toyko, Japan (Tel: +81 3 3508 2280), or Melbourne, Australia (Tel: +61 3 9600-9100), or through its web site at:
http://www.earthwatch.org



Peter Tyson/Earthwatch

Earthwatch volunteers help Dr Frank Paladino to scan endangered leatherback sea turtles for eggs

Sustainable trade

Farmers in Chile have increased exports of organic fruit by 400 per cent, sustainable wood producers in the Solomon Islands have increased their profits per tree forty-fold, and in Swaziland, the first fridge manufacturer in Africa to phase out CFCs saw its sales treble in one year.

These are just three examples of developing country producers gaining trade opportunities by targeting the increasing demand for sustainably-produced goods and services, illustrated in *Unlocking Trade Opportunities*, a new report from the International Institute for Environment and Development (IIED).

Commissioned by the United Nations, *Unlocking Trade Opportunities* investigates a diverse range of businesses across the manufacturing, agricultural, forestry and tourism sectors and finds both large and small producers gaining economic, environmental and social benefits by exporting to environmentally and social conscious markets.

Nick Robins, co-author of the report said: "There are now real trade benefits for developing country producers of sustainable goods and services. A few years ago people thought that it meant brazil nut body lotions and wind chimes. Now we're talking about high quality products from a whole range of sectors. Developing countries made US $500 million in premiums alone from organic products."

Trade, information, regulatory, capacity and financial barriers still hinder more widespread trade in sustainable goods and services. But the report illustrates how innovative partnerships between producers, importers, aid agencies and NGOs are managing to overcome these obstacles.

Unlocking Trade Opportunities is free of charge from Erik Brandsma at the UN Department for Policy Co-ordination and Sustainable Development, Room, DC2-22286, 2 UN Plaza, United Nations, New York, NY 10017, USA. The authors, Nick Robins and Sarah Roberts are based at IIED, 3 Endsleigh Street, London WC1H ODD, UK. Tel: +44 (0) 171 388 2177, Fax: +44 (0) 171 388 2826.

Fishing limits

Southern Bluefin Tuna populations could be at risk of extinction in the Southern Oceans if fishing continues at current levels, warns a new report by TRAFFIC Oceania, the wildlife trade monitoring programme of World Wide Fund (WWF) for Nature and The World Conservation Union (IUCN).

Supported by the WWF Endangered Seas Campaign, the report, *A Review of the Southern Bluefin Tuna Fishery: Implications for Ecologically Sustainable Management*, warns that the number of mature fish is now believed to be at the lowest levels recorded, and well below a biologically safe level. Bluefin Tuna are caught primarily for the luxury Japanese sashimi trade. They are among the most valuable fish targeted.

Australia, Japan and New Zealand are the major fishing nations and to date the only member countries of the Commission of the Convention for the Conservation of Southern Bluefin Tuna (CCSBT). So far they have failed to develop a joint management plan for the fishery.

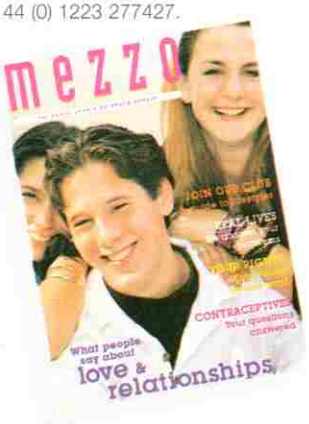
"The status of the Southern Bluefin Tuna parental population is now less than 9 per cent of that in 1960," said Glenn Sant, TRAFFIC Oceania Senior Research Officer. "Given the serious implications that a collapse in the stock would have on the species, ecosystem and fishing industry, we need to adopt a precautionary approach. The total annual catch, now set at 11,750 tonnes, should be reduced by 35 per cent to help ensure the number of breeding fish return to safe levels by the year 2020."

Of additional concern is the increasing catch by non-member countries, particularly Taiwan, Indonesia and South Korea. Indonesia's recent annual catch included 700 tonnes taken from the Southern Bluefin Tuna's sole spawning grounds, located off the coast of Java.

As Southern Bluefin Tuna are highly migratory, the co-operation of many nations and strong international catch restraint are now essential if the fishery is to rebuild safe and sustainable levels.

On a positive note, the CCSBT Commission met in Australia in September and agreed that urgent action is necessary to get South Korea and Indonesia to join the Convention and to obtain Taiwan's co-operation with the Conventions aims. Australia and New Zealand also advocated a certification scheme for Southern Bluefin Tuna.

For more information, contact Glenn Sant for TRAFFIC Oceania, Tel + 61 2 9299 6582 or Bobbie Jo Kelso for TRAFFIC International, Tel. + 44 (0) 1223 277427.



Youth speak out

Views on sexuality, reproduction and relationships of over 600 young people in 54 countries have been published by the International Planned Parenthood Federation (IPPF) in *Mezzo*, a magazine-style publication 'for young people, by young people'.

Produced with support from the UN Population Fund, the publication provides a worldwide snapshot of young people's thoughts on issues including love and relationships, marriage, contraception, pregnancy, parenthood and abortion. *Mezzo* is designed to supplement existing studies and statistics with personal opinions and experiences, offering a more direct understanding of young people's needs and aspirations.

Nearly 700 respondents aged from 14 to 28 from both developing and developed countries participated in the survey. They were married and unmarried, had different levels of education and came from urban and rural settings.

One in three young people surveyed found it difficult or even impossible to discuss sex with adults. The majority of respondents from Europe, Africa, and South Asia believed that parenthood at an early age was acceptable or indeed desirable, while in other regions the majority believed that early parenthood would pose problems or be undesirable.

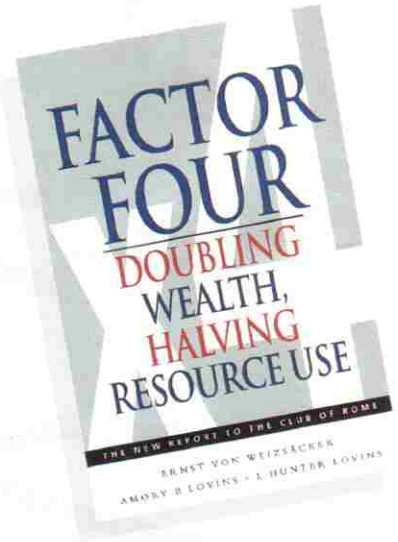
More than three-quarters of the respondents were aware of the risks of sexually transmitted diseases (STDs), including HIV/AIDS. However, a significant number of young people surveyed, particularly from Arab countries and some parts of the Far East are badly informed, believing that STDs, including HIV/AIDS are only a problem for homosexuals, sex workers and drug addicts. Almost all the young people who were interviewed said that they needed more information on all aspects of their sexual and reproductive health.

Launching *Generation 97*, an illustrated version of the survey results, on World Population Day, IPPF Secretary-General Ingar Brueggemann pointed out that the negative issues of young people's sexual lives were often focused on: "We have to understand how sexuality fits into the lives of our young people and address their sexual and reproductive health in a positive way."

Copies of *Mezzo* and *Generation 97* are available in English, French and Spanish from IPPF Distribution Unit, Regent's College, Inner Circle, Regent's Park, London NW1 4NS, UK. Fax: +44 (0) 171 487 7950. E-mail: csavage@ippf.org

Associates' News is compiled by **Maya Pastakia** *to whom all contributions should be addressed.*

Books


FACTOR FOUR
DOUBLING WEALTH, HALVING RESOURCE USE
THE NEW REPORT TO THE CLUB OF ROME
ERNST VON WEIZSÄCKER
AMORY B LOVINS • L HUNTER LOVINS

A REVOLUTION IN RESOURCES

FACTOR FOUR

Ernst von Weizsacker, Amory B. Lovins and L. Hunter Lovins
Earthscan, London, 1997, £15.99

Factor Four is one of the very best and most important reports the Club of Rome has ever put out.

It deals with the central challenge we face over the next half century: how to accommodate population growth and economic growth, while at the same time not just stabilizing the burden of consumption and waste currently threatening the planet, but reducing it below its present unsustainable level.

The maths of this challenge are daunting. By 2050, if economic growth continues at its recent rate, and population growth reaches the UN medium projection of 9.4 billion, we would need to cut our resource use for each unit of consumption by two thirds. In other words, we would need to increase resource productivity by a factor of three. To reduce environmental burdens to sustainable levels, we would need at least a factor four increase in resource productivity – hence the book's title.

In the long run we will need a lot more than factor four. If population stabilizes at below ten billion, and all the world reaches per capita incomes equal to today's high-income countries, we will need a Factor Ten revolution, as the Factor Ten club founded by Friedrich Schmidt Bleek recommends.

But *Factor Four* should be our immediate goal, and the beauty of this book is that it shows how feasible that might be on the basis of models that are working right now. Fifty documented examples show dramatic improvements in resource efficiency in energy, materials use and transport – superwindows that let light through but not heat; passive solar buildings in the Rockies that grow bananas in winter with no conventional energy input; refrigerators that use one tenth of the normal energy; systems to quadruple the number of trains that can use the same track, and so on.

Factor Four is not simplistic. It fully recognizes the obstacles that have held back the revolution in resource efficiency. Economists have fixed ideas – against the evidence – that saving energy and reducing pollution will always involve net costs. Discriminatory regulations often penalize resource saving over resource wasting. Architects are paid more, the more their building costs. Utility companies earn more, the more energy consumers waste.

So it is incisive in its recommendations. Incentives should be reversed: architects, utility companies and so on should be paid more the more they reduce costs and resource use. The regulatory playing field should be levelled between green approaches and old-style wasteful ways of doing things. Tax systems should be changed to penalize bads, not goods.

Another of the book's virtues is that it shows how the new technologies and approaches can save money, make money, and offer profit opportunities for business folk ready to exploit them. It offers win-win solutions that make life better for people and the planet at the same time.

Factor Four is well-documented, punchy and clearly written, often brilliantly incisive, full of information and original proposals. It is a must for the desks of all policy-makers, businessmen, architects, planners and government ministers throughout the world.

Paul Harrison

Paul Harrison is author of *Inside The Third World* and *The Third Revolution*, both Penguin, and a Contributing Editor of *People & the Planet*.

IN BRIEF

BEYOND THE GREEN HORIZON

S. Eber Ed. Tourism Concern/WWF, London 1992, £9.00 inc. p & p

Sets out ten principles of sustainable tourism and discusses why these are necessary and presents six case studies from around the world of attempts to put these principles into practice.

LAST RESORTS

P. Pattullo. Latin American Bureau/Cassell, London, 1996, £11.99 inc. p & p

Comprehensive collection and discussion of tourist codes and guidelines produced by the industry, development agencies and governments to promote responsible behaviour and practice.

PRESERVE OR DESTROY? TOURISM AND THE ENVIRONMENT

Jonathan Croall
Calouste Gulbenkian Foundation, London 1995, £7.95 inc. p & p

Readable book about the impact of global tourism and how to manage it, with specific case studies of sustainable tourism projects in the UK and Ireland. Useful appendix of addresses.

SUSTAINABLE TOURISM IN THE THIRD WORLD: PROBLEMS AND PROSPECTS

Erlet Cater
University of Reading, England 1991, £4.00 inc. p & p

Useful discussion paper taking the reader through different models and options for developing countries.

THE CHALLENGE OF TOURISM

A. O'Grady Ed. ECTWT, Bangkok 1990, £ 9.00 inc. p & p

This review of tourism's impact contains many case studies with cartoons and photos.

TOURISM AND DISPLACEMENT – 3 INFORMATION PACKS

Tourism Concern, London, 1995, £5.25 each inc. p & p

Information about tourism's part in the displacement of communities in Burma and East Africa (Kenya, Tanzania and Uganda), available either as a general pack or with East Africa or Burma focus.

TRADING PLACES

Anne Badger et al Tourism Concern, London 1996, £14.00 inc. p & p

Examines the impact of global economic policies and institutions on tourism in developing countries and introduces the concept of fair trade. Eight case studies include East and West Africa, Turkey, Caribbean and Egypt.

All these titles are available from Tourism Concern, 277-281 Holloway Road, London N7 8HN
Tel: 0171 753 3330 Fax: 0171 753 3331
Email: tourconcern@gn.apc.org
For a general Resource List send an A5 stamped addressed envelope.

ALSO RECOMMENDED

THE HOLIDAYMAKERS

J. Krippendorf
Heinemann, London 1988, £18.99

NO MAN'S LAND

G. Monbiot
Macmillan, London 1994, £17.99hb

ON THE WEB: ECoNETT is the European Community Network for Environmental Travel & Tourism. It provides a unique database of examples of good practice, projects, publications, codes of conduct and much more. ECoNETT can be accessed on the Internet at: www.wttc.org

Films

WOMEN'S RIGHTS

Denial of women's rights devastates the lives of millions around the world today. According to the latest UN Population Fund *State of World Population 1997* report, the failure to provide reproductive health care and basic education to the world's women – combined with continuing widespread discrimination and violence directed against women – constitutes a violation of human rights on a massive scale.

With support from the UN Population Fund and the John D. and Catherine T. MacArthur Foundation, TVE has produced a series of four 15-minute films which illustrate the reality of the report's findings. Through highly personal stories of women from four different countries: Ethiopia, Fiji, Jamaica and Latvia, each film tackles different areas of abuse of women's rights.

Patricka's Story focuses on the life of Patricka who is five months pregnant. She already has three children, and is worried about her fourth. For four years she's been subjected to increasingly violent attacks from her partner Don. Directed by Scottish film-maker, Diane Best, the film traces the origins and nature of domestic violence in the Caribbean.

Young Wives Tale, told by the English director Charlotte Metcalf, explores the subject of child marriage. Despite international treaties to protect women's and children's rights, recent statistics show that early marriage, arranged by girls' families, is actually on the increase in many parts of the world.

The film focuses on the life of Nibret, a young girl from a rural village in Ethiopia. She is only eleven and is being married to a teenage boy she has never met before. Will she survive the experience? Risks of complications from pregnancy and childbirth increase exponentially with girls whose bodies are not fully developed.

Girls of Chaka Street, directed by Latvian film-maker, Antra Cilinska, looks at the flourishing sex industry in Latvia, Lithuania and Estonia which took off in 1992 when the former Soviet Baltic republics gained independence and opened their borders to the outside world. Living standards crashed, unemployment soared, and young girls could earn more in a night from well-heeled visiting tourists than a trained doctor could in a month.

Charlotte Metcalf

Above: Nibret, a child bride in a rural village in Ethiopia prepares for her wedding

The film focuses on the life of Eva who last year was driven into the forest, stripped and gang-raped by 14 men who left her for dead. It was, she said, just one of the occupational hazards of working as a prostitute in Latvia.

The film also looks at the insidious role the Mafia plays in the sex trade, paying middle-men up to US$5,000 for supplying (often under-age) young girls for clubs and brothels in Berlin, Amsterdam, Brussels or Warsaw.

Caught in the Crossfire directed by Fijian film-maker, Atu Emberson-Bain, tells the story of Gyan and her sister Sushila who is deaf and dumb. A harsh reality and an elderly dependent father leave them little choice in finding a way to earn a living and they are forced into sex work.

Prostitution is a taboo subject and illegal in Fiji, but it is women and not men who get prosecuted. Their story shows the devastating effect economic and social breakdown can have on individual lives.

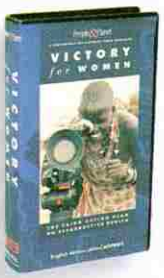
For copies of each film contact:
Distribution Office, TVE,
Prince Albert Road, London NW1 4RZ,
UK. Tel: + 44 (0)171 586 5526,
Fax: + 44 (0)171 586 4866,
Email: tve-dist@tve.org.uk
Web site: http://www.tve.org

VIDEOS IN DEMAND

The first four *People & the Planet* videos are in great demand. Copies have been ordered by more than 200 TV stations and non-government organizations in 50 countries.

All four 26-minute videos are available in English, French and Spanish versions from TVE at the address given below.

The four titles are **Investing in People** *(showing the importance of community participation in successful environmental projects)*, **Victory for Women** *(on the outcome of the Cairo Population Conference)*, **Learning for Life** *(on the education of women and girls) and* **Calling the Shots** *(on how women are finding new ways of communicating).*



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Prince Albert Road,
London NW1 4RZ,
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People & the Planet

Our next issue will report on sustainable agriculture

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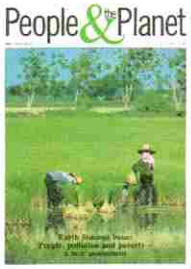
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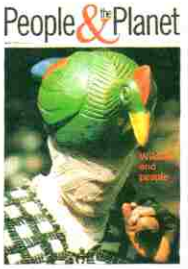
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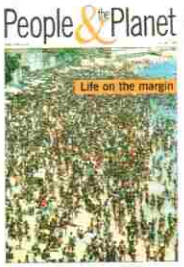
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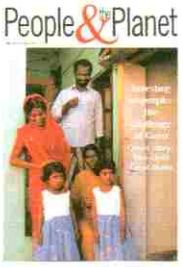
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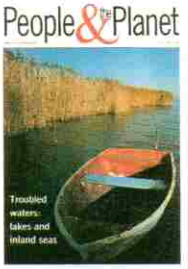
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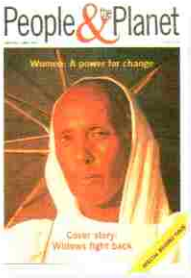
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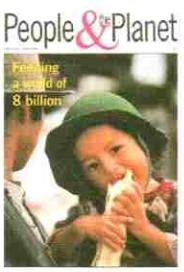
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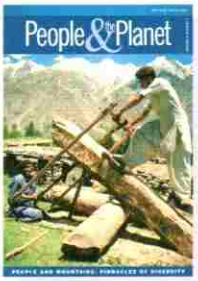
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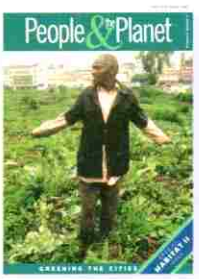
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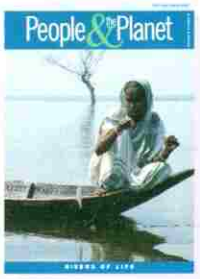
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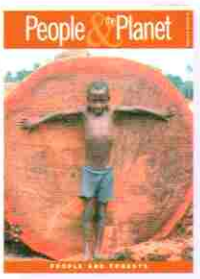
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